



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

October 4, 1999

**MEMORANDUM**

**SUBJECT:** Methamidophos. List A Case No. 0043. Chemical No. 101201. Revised Dietary Exposure and Risk Analyses for the HED Revised Human Health Risk Assessment and HED Review of the Bayer Corporation Probabilistic (Monte Carlo) Acute Dietary Exposure Assessment. DP Barcodes D256039, D256042 MRID No. 448154-10.

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Background

The Agency's preliminary "Human Health Risk Assessment and Supporting Documentation for the HED RED" was issued 10/30/98 (F.Fort, D250644). The preliminary risk assessment included a summary of estimated chronic and acute dietary exposure and risk. Both assessments included the

dietary risk from methamidophos exposure from use of methamidophos and from the use of acephate; methamidophos is a metabolite of acephate. Consequently two assessments were conducted -- one includes methamidophos exposure from methamidophos use only and the other includes methamidophos from all sources. Chronic dietary exposure estimates were based on highly refined anticipated residues and were generally below HED's level of concern. When the uses are aggregated (i.e. methamidophos from all sources) there is a concern for children (1-6 years) with 106% of the chronic reference dose (aRfD) consumed. A Tier 1 acute dietary exposure assessment, using worst case assumptions (i.e. tolerance level residues and no percent crop treated data), showed that risk from acute dietary exposure greatly exceeded HED's level of concern. The most highly exposed population subgroup was children (1-6 years) with up to 4635% aRfD consumed.

### **Action Requested**

A revised acute and chronic dietary exposure assessment is required to reflect changes in HED policy and to complete a more refined dietary exposure analysis. The following changes were incorporated:

- Revised Acute and Chronic anticipated residues were generated for methamidophos and a probabilistic analysis was conducted (Tier 3).
- A revised quantitative usage analysis (QUA) was completed by the Biological and Economic Analysis Division (BEAD);
- An HED policy revision which allows for use of the weighted average percent crop treated (%CT) in chronic dietary exposure analyses (rather than the estimated maximum %CT) was incorporated into the revised chronic analyses;
- HED revised the terms used for expressing dietary risk: an acute or chronic reference dose (aRfD or RfD) which includes the FQPA factor (1X, 3X, or 10X) is now referred to as the acute or chronic Population Adjusted Dose (aPAD or cPAD). The aPAD and cPAD are defined as the RfD (acute or chronic) divided by the FQPA safety factor.

### **Conclusion/Recommendation**

Acute and chronic, dietary exposure and risk estimates were generated using revised anticipated residue values for the insecticide methamidophos. The analyses were currently considered to be highly refined for the following reasons: (1) the assessments were based on monitoring data for all commodities except cotton for which field trial data are used, (2) processing, washing, and cooking factors from registrant-submitted studies were included in order to adjust for any changes of residues, and (3) commodities that are imported--namely strawberries, squash, and peppers--were incorporated in the exposure and risk analyses.

There is a degree of uncertainty in extrapolating exposures for certain population subgroups which may not be sufficiently represented in the consumption survey, e.g., nursing and non-nursing infants and Hispanic females. Therefore, risks estimated for these subpopulations were included in

representative populations having sufficient numbers of survey respondents (e.g., all infants, females (13-50 years))

### Methamidophos Application only

#### *Acute*

Revised acute dietary exposure and risk estimates for methamidophos are below HED's level of concern. Three probabilistic acute assessments were performed in order to identify the commodity/commodities responsible for driving the risk. In the first assessment, all commodities of interest (tomatoes, potatoes, cotton, squash, pepper, and strawberries) were included in the analysis. Assessment 2 excluded all imported commodities from the analysis, and Assessment 3 excluded tomatoes from analysis. Comparisons between the three assessments suggest that tomatoes constitutes the majority of the dietary risk to methamidophos. Children 1-6 years (exposure = 72% of acute Population Adjusted Dose (aPAD) when considering all commodities) was recognized as the population sub-group of greatest concern. Risk to the general U.S. population consumed 55% of the aPAD. Results for each acute dietary exposure and risk analysis are summarized in Table 3.

#### *Chronic*

Chronic, non-cancer dietary exposure and risk are below HED's level of concern. Chronic exposure to the general U.S. population consumed 7% of the cPAD. The most highly exposed population subgroup was children 1-6 years with a percent chronic population adjusted dose (% cPAD) of 15.

### Methamidophos Aggregate Assessment (All sources)

#### *Acute*

An acute aggregate risk (food) which considers methamidophos from application of acephate and methamidophos was also conducted. Residue refinements including anticipated residues generated from field trial and monitoring data, adjustments for percent crop treated, washing and cooking factors and a probabilistic/Monte Carlo acute analysis were utilized. Applying all of these refinements, the most highly exposed population subgroup was children 1-6 years with a %aPAD of 119%. For the general U.S. population, 79% of the aPAD was consumed. The results indicate that for children, HED's level of concern are exceeded. Additional analyses were completed to determine the impact of certain commodities on the dietary risk. Results show that tomatoes contributed significantly to the risk.

#### *Chronic*

Chronic exposures to methamidophos from application of acephate and of methamidophos were combined and compared to the methamidophos PAD. Results of the chronic exposure analysis show

that 23% of the cPAD is consumed for the U.S. population. The most significantly exposed subpopulation, children (1 to 6 years) occupied 37% of the cPAD. The results indicate that HED has no concern for chronic aggregate exposure to methamidophos from food alone.

## **Detailed Considerations**

### **Review of Bayer Corporation Monte Carlo Assessment.**

In response to the Agency's preliminary risk assessment, Bayer Corporation submitted a probabilistic acute dietary exposure and risk analysis. HED noted the following differences in the dietary assessments.

- The registrant used the EXPOSURE 4<sup>TM</sup> software with Monte Carlo option from Technical Assessment Systems, Inc. (TAS). HED used the Dietary Exposure Evaluation Model (DEEM<sup>TM</sup>) from Novigen, Inc.
- The Bayer assessment did not include the imported commodities--squash, strawberries, or peppers.
- Bayer used only 1996 monitoring data for tomatoes. The HED revised assessment includes 1997 PDP monitoring data on tomatoes.
- For non-blended commodities for which monitoring data is available, the registrant imputed composite values from monitoring data using a procedure by Sielken, Inc. The revised HED assessment employs a method by Hans Allendar.
- Percent crop treated data were taken by the registrant from the 1995 through 1997 Doanes survey. HED used data provided by the Biological and Economic Analysis Division (BEAD).

The Bayer analysis computed an acute dietary risk which is below HED's level of concern. This analysis is not acceptable based on the noted comments regarding percent crop treated data and exclusion of imported commodities, and use of the Sielken Inc. method, etc. However, much of the information in the submission, such as field trial data and processing factors, will be employed in the HED in-house analysis.

## **Revised Dietary Exposure Assessment**

### **Toxicology Information**

The Reference Dose (RfD) used in the chronic analysis is 0.0003 mg/kg bwt/day. This RfD was derived from a no observable adverse effects level (NOAEL) of 0.03 mg/kg/day based primarily on brain cholinesterase inhibition at 0.06 mg/kg/day and an uncertainty factor of 100 (See HazID Committee Report, 2/12/98). Methamidophos is classified as a “not likely” human carcinogen.

The endpoint for the acute dietary risk assessment is the acute reference dose (aRfD) of 0.003 mg/kg bwt/day. The aRfD was calculated from a NOAEL of 0.3 mg/kg bwt/day using an acute neurotoxicity study in the rats indicating plasma, erythrocyte, and brain cholinesterase inhibition at 0.7 mg/kg/day, and an uncertainty factor of 100 (See HazID Committee Report, 2/12/98).

The FQPA Safety Factor Committee retained a 3X factor because there is an indication of neurotoxic effects in hens and in humans. A developmental neurotoxicity study is needed to properly evaluate the neurotoxicity of this chemical. Therefore, the aPAD and cPAD are 0.001 mg/kg/day and 0.0001 mg/kg/day, respectively. The aPAD and cPAD are defined as aRfD/FQPA safety factor. A summary of the methamidophos doses and endpoints are presented in Table 1.

Table 1. Summary of Doses and Endpoints for Dietary Risk Assessment for Methamidophos				
Exposure Scenario	Dose (mg/kg/day) [Uncertainty Factor]	Endpoint	Study	RfD/PAD (mg/kg/day)
Acute dietary	0.3 (NOAEL)  Conventional UF = 100X FQPA = 3X	Brain, plasma, erythrocyte ChE inhibition	acute neurotoxicity study in rats	aRfD = 0.003  aPAD = 0.001
Chronic dietary	0.03 (NOAEL)  Conventional UF = 100X FQPA = 3X	Brain, plasma, erythrocyte ChE inhibition	8-week toxicity-rat	RfD = 0.0003  cPAD = 0.0001
Carcinogenicity	n/a	n/a	Carcinogenicity study in rat and mouse	“not likely” human carcinogen

1. ChE = cholinesterase; NOAEL = No Observable Adverse Effect Level

RfD = Reference Dose=NOAEL/UF; PAD = Population Adjusted Dose = RfD/FQPA Safety Factor

2. The conventional uncertainty factor of 100X consists of 10X for interspecies extrapolation and 10X for intraspecies variability

## Usage Information

A revised quantitative usage analysis (QUA) for methamidophos has been completed by BEAD/OPP (see Attachment 1, T. Kiely, 11/12/98). These data are based on available pesticide survey usage information for the years of 1987 through 1996. The analysis shows that the largest markets in terms

of total pounds active ingredient are allocated to potatoes (58%) and tomatoes (25%). These percent crop treated (% CT) data will be used to determine the risk from use of methamidophos only. The acephate QUA dated 6/8/99 will be used to determine the percent crop treated for risk from acephate use. The revised QUAs included both the estimated maximum and weighted average %CT, as well as the average application rates and number of applications. Percent imported data were obtained from the registrant, Bayer Corporation and verified by BEAD/OPP (Personal communication with T. Kiely, BEAD/OPP, 8/4/99).

### **Consumption Data**

HED conducts dietary risk assessments using the Dietary Exposure Evaluation Model (DEEM<sup>TM</sup>), which incorporates consumption data generated in USDA's Continuing Surveys of Food Intakes by Individuals (CSFII), 1989-1992. For acute dietary risk assessments, the entire distribution of consumption events for individuals is combined with either a single residue level (deterministic analysis, risk at 95<sup>th</sup> percentile of exposure reported) or a distribution of residues (probabilistic analysis, referred to as 'Monte Carlo,' risk at 99.9th percentile of exposure reported) to obtain a distribution of exposure in mg/kg/day. For chronic dietary risk assessments, the three-day average of consumption for each sub-population is combined with residues in commodities to determine average exposure in mg/kg/day.

### **Methamidophos (Methamidophos Application Only)**

#### **Residue Data**

As a result of an agreement between the registrant of methamidophos and EPA, methamidophos currently may be applied only to potatoes, tomatoes, and cotton. All uses other than potatoes and cotton were deleted from the FIFRA Section 3 labels as of December 31, 1997. Under the same agreement, the use pattern for tomatoes is limited to FIFRA Section 24(c) labels in 11 states. The registrant has also submitted an import tolerance petition for peppers, strawberries, and squash (PP#9E5040). There is an existing tolerance for methamidophos on peppers, but none has been established for the latter two commodities. Peppers, strawberries, and squash have been included in the revised dietary exposure analyses.

Pending label amendments for some crops, adequate field trial data are available to reassess the established tolerances for residues in cottonseed, potatoes, and tomatoes. The available data suggest that the tolerance levels for cottonseed and tomato should be raised to 0.2 ppm and 2.0 ppm, respectively. A tolerance for residues of methamidophos in/on cotton gin byproducts must be proposed. The available data support a tolerance level of 10 ppm.

There are registered acephate uses for the following crops for which there are methamidophos tolerances: beans (dry and succulent), brussels sprouts, cauliflower, celery, cranberries, lettuce, mint, and peppers.

An anticipated residue memorandum was completed 9/8 /99 (Attachment 12).

A summary of anticipated residues used in the revised dietary risk assessments may be found in Table 2a for chronic exposure and 2b for acute exposures. The estimates are based on USDA Pesticide Data Program (PDP) monitoring data for potatoes and tomatoes, field trial data for cotton, and FDA import monitoring data for peppers, squash, and strawberries. Details can be found in the anticipated residue memorandum (see C. Olinger, D258359, 9/8/99).

### ***Monitoring Data***

Monitoring data for methamidophos were generated through the USDA Pesticide Data program (PDP) for potatoes and tomatoes and through the FDA Surveillance Monitoring Program for peppers, squash, and strawberries. Data from these sources were then used to estimate the dietary exposure and risk for methamidophos. Field trial (FT) data were used for cotton. A summary of the monitoring (PDP & FDA)/field trial data used to determine residue input values for the acute and chronic dietary analyses is contained in 09/08/99, C. Olinger memorandum.

For the probabilistic acute dietary exposure analysis, monitoring data were used to generate residue distribution files (RDFs). Commodities were considered to be non-blended, blended, or partially blended in accordance with HED SOP 99.3.

Detectable residues from composite monitoring data for non-blended food forms were used to generate residue values in single units using the methods described in the H. Allender paper dated 5/26/99 "Statistical methods for Use of Composite Data in Acute Dietary Risk Assessment." The "decomposed" residues were then included in RDFs for the probabilistic analysis.

For partially blended food forms, the distribution of composite monitoring data was incorporated directly into an RDF with no decomposition needed to generate single unit residue values.

For blended food forms, the average residue value was calculated and incorporated as a single point estimate residue value.

Attachment 1 contains the individual residue values included in the RDFs.

### ***Processing Factors***

The above referenced memorandum (C. Olinger; 09/08/99) also provided processing factors to be included in the DEEM™ analyses. The following values were specifically entered as Adjustment Factor #1 for the identified commodity food forms:

<u>Commodity - Food Form -Designation</u>	<u>Processing Factor</u>
Potatoes - Processed Commodities - Partially Blended	1.0
Potatoes - Processed Commodities - Blended	1.0
Potatoes - Processed Commodities - Not Blended -Fried	10
Tomatoes - Processed Commodities - Partially Blended - Juice	0.9
Tomatoes - Processed Commodities - Partially Blended - Cooked , Canned	0.7
Tomatoes - Processed Commodities - Blended - Catsup	0.7

In order to further refine the estimated chronic and acute exposures and risks, washing and cooking factors from registrant-submitted studies were included in the DEEM™ analyses. A generic washing factor of 0.77 was applied to squash (summer, winter, and spaghetti), uncooked bell peppers, and uncooked non-bell peppers. A washing factor of 0.6 for peaches was used for strawberries since both peaches and strawberries were reasoned to have similar significant surface textures that affect pesticide adherence to fruit. The following cooking factors were also included in analyses as Adjustment Factor 1 for the listed commodity food forms:

<u>Commodity - Food Form</u>	<u>Cooking Factor</u>
Pepper (bell & non-bell) - canned or cooked	0.595
Tomatoes - whole - canned	0.7
Potatoes/white - whole	0.195
Potatoes/white - unspecified	0.195
Potatoes/white - peeled	0.195

Table 2a. Summary of Anticipated Residues to be Used in Chronic Dietary Assessments <sup>1</sup> (Methamidophos Application Only)

Commodity	Average of Detects, ppm	Weighted Avg of Nondetects, ppm	Weighted Avg, % Crop Treated (%CT)	Percent Imported	Percent Detects	Chronic AR (all Imports Treated) <sup>3</sup>	Chronic AR (Using Registrant %CT for imp) <sup>4,5</sup>
Potato	0.0098	0.002	21	--	1	0.00044	0.00044
Tomato	0.0376	0.002	32	--	32	0.012	0.012
Cotton	0.04	- <sup>2</sup>	<1	--	--	0.0004	0.0004
Bell Pepper	0.124	0.003	60	20	24	0.0064	0.0062
Non-Bell Pepper	0.124	0.003	60	20	34	0.0088	0.0086
Squash	0.027	0.003	45.7	70.3	3	0.0026	0.0015
Strawberry	0.21	0.003	30	6.5	8	0.0013	0.0011

<sup>1</sup>All anticipated residues are based on FDA or PDP monitoring data with the exception of cotton, where field trial data were used.

<sup>2</sup>Not used as field trial data were used to derive the anticipated residue.

<sup>3</sup>Chronic anticipated residue assuming all imported commodities are treated.

<sup>4</sup>Chronic anticipated residue using registrant value for percent of imported commodities treated.

<sup>5</sup>Used in Chronic Assessment

Table 2b. Anticipated Residues for Acute Exposure to Methamidophos from Application of Products Containing Methamidophos as an Active Ingredient

Commodity	Reassessed Tolerance	Percent Crop Treated <sup>1</sup>		Percent Imported <sup>1</sup>	Adjustment Factor for Processing	Data Source for AR	Acute Anticipated Residue, ppm
		Weighted Average	Estimated Max				
Potatoes - RAC - Not Blended (except Fried)	0.1	21	27	--	N/A	PDP	RDF File: Detects: (19 total) 0.038; 0.026; 0.022; 0.015; 0.006 (11x); 0.005 (3x); 0.004 1/2LOD: 359@0.002 Zeroes: 1023@0  RDF #1
Potatoes - Processed Commodities, Partially Blended	None; RAC tolerance applies	21	27	--	1.0	PDP	Use RDF file for Potato RAC  RDF #1
Potatoes - Processed Commodities, Blended	None; RAC tolerance applies	21	27	--	1.0	PDP	0.00064
Potato- Fried	0.1	21	27	--	10	PDP	Use RDF file for Potato RAC  RDF #1
Tomatoes - RAC and Not Blended	2.0	19	27	--	DD <sup>5</sup>	PDP	DECOMPOSITE PDP Data 998NZ 2121Z  RDF #9

Table 2b. Anticipated Residues for Acute Exposure to Methamidophos from Application of Products Containing Methamidophos as an Active Ingredient

Commodity	Reassessed Tolerance	Percent Crop Treated <sup>1</sup>		Percent Imported <sup>1</sup>	Adjustment Factor for Processing	Data Source for AR	Acute Anticipated Residue, ppm
		Weighted Average	Estimated Max				
Tomatoes - Processed - Partially Blended - Juice and Catsup	None; RAC tolerance applies	19	27	--	0.9	PDP	Use RDF file of PDP Data Directly 282NZ 602Z  RDF #6
Tomatoes - Processed - Partially Blended - Cooked, Canned	None; RAC tolerance applies	19	27	--	0.7	PDP	Use RDF file of PDP Data Directly 282NZ 602Z  RDF #6
Tomatoes - Processed - Partially Blended - All except Juice, catsup and canned	None; RAC tolerance applies	19	27	--	DD <sup>5</sup>	PDP	Use PDP Monitoring data directly; adding zeroes to represent not treated.  RDF #6
Cotton	0.2	<1	1	--	1.0	FT	0.04
Bell Peppers - Fresh (Imported) - (Not Blended)	TBD	60		20	DD <sup>5</sup>	FDA	DECOMPOSITE USING FDA DATA 979NZ 17952Z 1469@0.003  RDF #8

Table 2b. Anticipated Residues for Acute Exposure to Methamidophos from Application of Products Containing Methamidophos as an Active Ingredient

Commodity	Reassessed Tolerance	Percent Crop Treated <sup>1</sup>		Percent Imported <sup>1</sup>	Adjustment Factor for Processing	Data Source for AR	Acute Anticipated Residue, ppm
		Weighted Average	Estimated Max				
Bell Peppers - Processed (Imported) - (Partially Blended)	TBD <sup>2</sup>	60		20	DD <sup>5</sup>	FDA	USE RDF FILE FDA MONITORING DATA DIRECTLY; 142NZ 2627Z 216@1/2LOD(0.003)  RDF #2
Non Bell Peppers - <sup>3</sup> Fresh (Imported) - (Not Blended)	TBD <sup>2</sup>	60		20	DD <sup>5</sup>	FDA	DECOMPOSITE USING FDA DATA 979NZ 17952Z 1469@0.003  RDF #8
Non-Bell Peppers - Processed (Imported) - (Partially Blended)	TBD <sup>2</sup>	60		20	DD <sup>5</sup>	FDA	Use RDF File of FDA Data Directly: 242NZ, 3155Z, 188@1/2LOD(0.003)  RDF #3
Squash (Imported)	TBD <sup>4</sup>	45.7		70	DD <sup>5</sup>	FDA	Use RDF File of FDA Data Directly: 6@0.005; 0.014, 0.043, 0.087 , 0.057, 0.094; 164@0.003; 768@0  RDF #4

Commodity	Reassessed Tolerance	Percent Crop Treated <sup>1</sup>		Percent Imported <sup>1</sup>	Adjustment Factor for Processing	Data Source for AR	Acute Anticipated Residue, ppm
		Weighted Average	Estimated Max				
Strawberries (Imported)	TBD <sup>4</sup>	30		6.5	DD <sup>5</sup>	FDA	Use RDF file of FDA Data Directly: 9@0.005; 0.053; 0.054; 0.059; 2.5; 34@0.003; 2369@0 RDF #5

1. Percent crop treated are from the Quantitative Usage Analysis dated 11/12/98, T. Kiely. Percent Imported are from a personal communication with T. Kiely, 8/4/99.

2. TBD - To be determined. Existing tolerance is 1.0 to cover domestic use which has been removed from label. Residues of methamidophos are expected from acephate use.
3. Non-Bell peppers includes pimentos (B. Schneider, personal communication, 7/22/99).
4. TBD = to be determined at the time of the review of the import tolerance petition.
5. DD = DEEM Default. Use DEEM default values when considering the processed products.

## **Results**

Acute and chronic, dietary exposure and risk estimates were generated using revised anticipated residue values for the insecticide methamidophos. The analyses were considered to be highly refined for the following reasons: (1) the assessments were based on monitoring data for all commodities except cotton for which field trial data are used, (2) processing, washing, and cooking factors from registrant-submitted studies were included in order to adjust for reduction of residues, and (3) commodities that are imported--namely strawberries, squash, and peppers--were incorporated in the exposure and risk analyses.

### **Acute**

Results for each acute dietary exposure and risk analysis are summarized in Table 3. Acute dietary exposure and risk estimates for methamidophos are below HED's level of concern. A total of three acute assessments were performed in order to identify the commodity/ commodities responsible for driving the risk. In the first assessment, all commodities of interest (tomatoes, potatoes, cotton, squash, pepper, and strawberries) were included in the analysis. Assessment 2 excluded all imported commodities from the analysis and Assessment 3 excluded tomatoes from analysis. Comparisons between the three assessments suggest that tomatoes constitute the majority of the dietary risk to methamidophos. Children 1-6 years (exposure = 70% of aPAD when considering all commodities) was identified as the population subgroup of greatest concern. Risk to the general U.S. population consumed 53% of the aPAD.

### **Chronic**

Chronic dietary exposure and risk estimates are also included in Table 3. Chronic, non-cancer dietary exposure and risk are below HED's level of concern. Chronic exposure to the general U.S. population consumed 7% of the cPAD. The most highly exposed population subgroup was children 1-6 years with a percent chronic population adjusted dose (% cPAD) of 15.

Table 3. Methamidophos Acute and Chronic Non-Cancer Dietary Exposure and Risk Estimates (Methamidophos Applications only)

Population Subgroup	Acute Assessment (99.9th %-ile of Exposure)						Chronic Assessment	
	All Commodities		Excluding All Imports		Excluding Tomatoes			
	Exposure (mg/kg/day)	% aPAD	Exposure (mg/kg/day)	% aPAD	Exposure (mg/kg/day)	% aPAD	Exposure (mg/kg/day)	% cPAD
General U.S. Population	0.000546	55	0.000533	53	0.000061	6	0.000007	7
All Infants (<1 yr)	0.000374	37	0.000326	33	0.000050	5	0.000004	4
Children (1-6 yrs)	0.000724	72	0.000706	71	0.000106	11	0.000015	15
Children (7-12 yrs)	0.000691	69	0.000655	66	0.000092	9	0.000011	11
Females (13-50 yrs)	0.000497	50	0.000482	48	0.000043	4	0.000006	6

<sup>1</sup> The acute population adjusted dose (aPAD) is 0.001 mg/kg/day and the chronic population adjusted dose (cPAD) is 0.0001 mg/kg/day. Refer to text pgs. 2-3 for details on endpoint selection.

## **Aggregate Assessment (Application of Methamidophos and Acephate)**

Methamidophos is a metabolite of acephate, therefore, an aggregate risk assessment which determines the risk from methamidophos from application of acephate and application of methamidophos was conducted.

Acephate commodities of interest are succulent and dry beans, Brussels sprouts, cauliflower, celery, cottonseed, cranberries, head lettuce, macadamia nuts, mint, peanut, peppers (bell and non-bell) and soybean. There are only two commodities for which tolerances exist for both acephate and methamidophos; cotton and peppers. For all other commodities, the anticipated residue used in the non-aggregate dietary analysis was used for the aggregate assessment (see Tables 2a and 2b and Attachment 11 in this document).

### *Cotton*

The anticipated residue for cotton from both the acephate use and the methamidophos use was derived from field trial data. For the aggregate assessment, an average field trial residue was determined by averaging the residues from the acephate and methamidophos field trials.

#### **Cotton - Methamidophos Residues from Methamidophos application**

<0.01	<0.01	<0.01	<0.01	0.015
<0.01	<0.01	0.049	<0.01	0.050
<0.01	<0.01	0.073	0.055	0.060
<0.01	0.084	0.119	0.036	
<0.01	0.090	0.191	0.010	

#### **Cotton - Methamidophos Residues from Acephate application**

<0.01	<0.01	0.01	0.05	0.04
<0.01	<0.01	0.01	0.03	0.04
<0.01	<0.01	0.05	0.03	
<0.01	<0.01	0.05	0.04	

#### **Average Residue = 0.03**

The average residue will be incorporate the highest percent crop treated data reported. Since the acephate %CT is the highest at 13%, this will be used in the aggregate dietary assessment. The cotton processing factor of 1.0 will be used as adjustment factor 1 for cottonseed oil and meal.

### *Peppers*

The AR for peppers from the acephate use was derived from acephate field trial data while the AR for peppers from the methamidophos use was from FDA monitoring data and included import data only. For the aggregate assessment, HED will use all available FDA monitoring data (import and domestic). As with cotton, the highest reported %CT was used (48% from acephate usage). The RDFs for peppers are attached as Attachment 12 and are summarized in Table 4 below.

Table 4.

Bell Peppers (Except frozen, cured, and canned)- Not Blended	Bell Peppers (frozen, cured and canned)- Partially Blended	Non-Bell Peppers (Except frozen, cured, and canned) - Not Blended	Non-Bell Peppers (frozen, cured and canned)- Partially Blended
Composite 976NZ 2417Z 1255@1/2LOD	Use data directly 338 NZ 839Z 436 @1/2LOD	Composite 977 NZ 1540Z 444@1/2LOD	Use data directly 526 NZ 838Z 248@1/2LOD

## Results

The results of the aggregate assessment are shown in Table 5.

### *Chronic*

Chronic exposures to methamidophos from application of acephate and application of methamidophos were combined and compared to the methamidophos PAD. Results of the chronic exposure analysis show that 23% of the cPAD is consumed for the U.S. population. The most significantly exposed sub-population, non-nursing infants and children (1 to 6 years) occupied 37% of the cPAD, respectively. The results indicate that HED has no concern for chronic aggregate exposure from food alone.

### *Acute*

An acute aggregate risk (food) which considers methamidophos from application of acephate and methamidophos was also conducted. Residue refinements including anticipated residues generated from field trial and monitoring data, adjustments for percent crop treated, washing and cooking factors and a probabilistic/Monte Carlo acute analysis were utilized. Applying all of these refinements, the most highly exposed population subgroup was children 1-6 years with a %aPAD of 119%. For the general U.S. population, 79% of the aPAD was consumed. The results indicate that for children, HED's level of concern are exceeded. Additional analyses were completed to determine the impact of certain commodities on the dietary risk. Results show that tomatoes contributed significantly to the risk.

Table 5 . Aggregate Exposure: Summary of Methamidophos Acute and Chronic Non-Cancer Dietary Exposure and Risk Estimates

Population Subgroup	METHAMIDOPHOS					
	Acute (99.9%-ile)				Chronic	
	All Commodities		Excluding Tomatoes			
	Exposure (mg/kg/day)	% aPAD	Exposure (mg/kg/day)	% aPAD	Exposure (mg/kg/day)	%cPAD
General US Population	0.000787	79	0.000308	31	0.000023	23
All infants (<1 year)	0.001074	107	0.000774	77	0.000031	31
Children 1-6 years	0.001194	119	0.000604	60	0.000037	37
Children 7 -12 years	0.000976	98	0.000369	37	0.000030	30
Females 13 -50 years	0.000653	65	0.000240	24	0.000021	21

1 . Methamidophos - The acute Population Adjusted Dose (aPAD ) is 0.001 mg/kg/day ; the chronic PAD (cPAD) is 0.0001 mg/kg/day.

Attachments:

- Attachment 1: Methamidophos Acute Dietary Exposure Analysis: Residue Distribution Files
- Attachment 2: Methamidophos Chronic, Non-Cancer Dietary Exposure Analysis
- Attachment 3: Methamidophos Acute Dietary Exposure Analysis : All Commodities
- Attachment 4: Methamidophos Acute Dietary Exposure Analysis : Excluding Imports
- Attachment 5: Methamidophos Acute Dietary Exposure Analysis : Excluding Tomatoes
- Attachment 6: Aggregate Assessment: Methamidophos Chronic, Non-Cancer Dietary Exposure Analysis
- Attachment 7: Aggregate Assessment: Methamidophos Acute Dietary Exposure Analysis: All Commodities
- Attachment 8: Aggregate Assessment: Methamidophos Acute Dietary Exposure Analysis: Excluding Tomatoes
- Attachment 9: Aggregate Assessment: Residue Distribution Files -Bell and Non-bell Peppers
- Attachment 10: Methamidophos Quantitative Usage Analysis (QUA)
- Attachment 11: Anticipated Residues Of Methamidophos from Acephate Application Only

ATTACHMENT 1: Residue Distribution Files

**RDF # 1**

*Potatoes- all except dried potatoes*

*1994 -1995 PDP data (1401 samples, 19 detects)*

*Data used directly*

*1% detects (residues found ranged from 0.004 - 0.038)*

*27% CT*

POTATOES

TOTALNZ = 19

TOTALZ = 1023

TOTALLOD = 359

LODRES=0.002

0.038	0.006	0.006	0.006	0.006
0.006	0.006	0.006	0.006	0.006
0.006	0.005	0.005	0.004	
0.005	0.022	0.015	0.006	
0.026				

**RDF # 2**

*Bell peppers: Frozen, canned and cured*

*1996 - 1998 FDA data - imports only*

*598 samples, 142 detects*

*Data used directly- (residues found ranged from 0.005 - 0.8 ppm)*

*24% detects*

*20% imported*

BELL PEPPERS

TOTALNZ = 142

TOTALZ = 2627

TOTALLOD = 216

LODRES=0.003

0.170	0.100	0.130	0.300	0.100	0.005	0.305	0.150
0.550	0.040	0.100	0.005	0.150	0.200	0.060	0.030
0.011	0.120	0.150	0.200	0.100	0.800	0.080	0.100
0.005	0.030	0.100	0.800	0.120	0.030	0.170	0.450
0.129	0.040	0.120	0.30	0.030	0.050	0.200	0.120
0.250	0.200	0.030	0.050	0.030	0.040	0.250	0.010
0.005	0.150	0.030	0.040	0.015	0.100	0.150	0.200
0.020	0.110	0.015	0.100	0.055	0.180	0.100	0.020
0.100	0.030	0.055	0.180	0.190	0.060	0.080	0.160
0.040	0.350	0.190	0.060	0.130	0.030	0.010	0.100
0.060	0.090	0.130	0.030	0.240	0.090	0.030	0.100
0.070	0.080	0.240	0.090	0.070	0.018	0.020	0.028
0.080	0.090	0.070	0.018	0.040	0.090	0.150	0.097
0.070	0.100	0.040	0.090	0.150	0.200	0.090	0.075
0.020	0.070	0.150	0.200	0.025	0.330	0.030	0.044
0.030	0.120	0.025	0.330	0.040	0.090	0.050	
0.150	0.30	0.040	0.030	0.200	0.030	0.140	
0.250	0.030	0.200	0.130	0.300	0.070	0.060	
0.500							

ATTACHMENT 1: Residue Distribution Files

**RDF #3**

**Non-Bell Peppers**

**1996-1998 FDA data - imports only**

**717 samples, 242 detects**

**Data used directly - (residues found ranged from 0.005 - 0.9 ppm)**

**34% detects**

**20% imported**

**NON-BELL PEPPER**

TOTALNZ = 242

TOTALZ = 3155

TOTALLOD = 188

LODRES = 0.003

0.250	0.030	0.200	0.020	0.080	0.080	0.030	0.100
0.080	0.005	0.040	0.005	0.030	0.040	0.026	0.010
0.150	0.120	0.120	0.005	0.050	0.050	0.090	0.134
0.030	0.040	0.130	0.340	0.030	0.120	0.020	0.150
0.028	0.080	0.120	0.116	0.140	0.200	0.010	0.140
0.040	0.060	0.040	0.005	0.030	0.070	0.005	0.012
0.020	0.050	0.005	0.420	0.020	0.020	0.170	0.450
0.020	0.060	0.005	0.005	0.300	0.010	0.074	0.120
0.005	0.040	0.130	0.110	0.060	0.120	0.200	0.070
0.010	0.050	0.020	0.030	0.020	0.060	0.040	0.070
0.100	0.700	0.030	0.005	0.200	0.020	0.030	0.051
0.020	0.040	0.130	0.710	0.150	0.010	0.030	0.050
0.300	0.080	0.190	0.110	0.010	0.600	0.050	0.130
0.200	0.090	0.200	0.020	0.110	0.005	0.154	0.110
0.070	0.005	0.300	0.020	0.005	0.600	0.062	0.200
0.030	0.010	0.020	0.180	0.500	0.400	0.050	0.109
0.030	0.005	0.060	0.110	0.500	0.073	0.060	0.140
0.020	0.150	0.230	0.160	0.020	0.129	0.500	0.103
0.050	0.450	0.080	0.020	0.120	0.102	0.100	0.124
0.500	0.050	0.005	0.068	0.110	0.050	0.220	0.020
0.300	0.300	0.030	0.065	0.090	0.020	0.100	0.020
0.300	0.120	0.010	0.005	0.170	0.199	0.170	0.200
0.150	0.250	0.010	0.051	0.040	0.047	0.100	0.012
0.100	0.100	0.005	0.040	0.080	0.020	0.250	0.210
0.100	0.130	0.010	0.050	0.850	0.120	0.050	0.031
0.330	0.110	0.030	0.300	0.900	0.020	0.010	0.408
0.020	0.120	0.005	0.200	0.050	0.204	0.086	0.361
0.080	0.050	0.180	0.080	0.067	0.030	0.402	0.119
0.150	0.250	0.260	0.059	0.020	0.350	0.084	0.035
0.150	0.050	0.005	0.080	0.040	0.500	0.020	0.120
0.050	0.500						

**RDF #4**

ATTACHMENT 1: Residue Distribution Files

*Squash*

*1996-1998 FDA data - imports only*

*388 samples, 11 detects*

*Data used directly - (residues found ranged from 0.005 - 0.094 ppm)*

*3% detects*

*70% imported*

SQUASH

TOTALNZ = 11

TOTALZ = 371

TOTALLOD = 173

LODRES = 0.003

0.005 0.014

0.005 0.043

0.005 0.087

0.005 0.057

0.005 0.094

0.005

*RDF #5*

*Strawberry*

*1996-1998 FDA data - imports only*

*157 samples, 13 detects*

*Data used directly - (residues found ranged from 0.005 - 2.5 ppm)*

*8% detects*

*6.5% imported*

STRAWBERRY

TOTALNZ = 13

TOTALZ = 2369

TOTALLOD = 34

LODRES = 0.003

0.005 0.005 0.054

0.005 0.005 0.059

0.005 0.005 2.5

0.005 0.005

0.005 0.053

*RDF # 6*

*Tomato*

ATTACHMENT 1: Residue Distribution Files

**1996-1997 PDP data**

**884 samples, 282 detects**

**Data used directly - (residues found ranged from 0.002 - 0.35 ppm)**

**32% detects**

**32% CT**

TOMATO

TOTALNZ = 282

TOTALZ = 602

TOTALLOD = 0

LODRS = 0.0022

0.35	0.051	0.025	0.025	0.023	0.022	0.02	0.018
0.059	0.025	0.013	0.01	0.01	0.01	0.01	0.008
0.026	0.014	0.005	0.005	0.005	0.005	0.005	0.005
0.016	0.005	0.002	0.11	0.068	0.05	0.031	0.021
0.007	0.002	0.012	0.01	0.008	0.005	0.005	0.002
0.002	0.016	0.14	0.12	0.1	0.09	0.08	0.069
0.018	0.18	0.048	0.043	0.038	0.035	0.032	0.028
0.32	0.05	0.025	0.025	0.023	0.022	0.019	0.018
0.058	0.025	0.013	0.01	0.01	0.01	0.01	0.008
0.025	0.014	0.005	0.005	0.005	0.005	0.005	0.005
0.016	0.005	0.002	0.1	0.06	0.044	0.026	0.02
0.006	0.002	0.01	0.009	0.008	0.005	0.002	0.068
0.002	0.016	0.13	0.12	0.098	0.089	0.08	0.028
0.018	0.18	0.048	0.043	0.037	0.035	0.031	0.018
0.29	0.05	0.025	0.025	0.023	0.021	0.019	0.008
0.055	0.025	0.013	0.01	0.01	0.01	0.009	0.002
0.025	0.014	0.005	0.005	0.005	0.005	0.005	0.019
0.016	0.005	0.25	0.095	0.057	0.043	0.024	0.065
0.006	0.002	0.01	0.008	0.008	0.005	0.002	0.027
0.002	0.015	0.13	0.12	0.092	0.089	0.07	0.017
0.018	0.16	0.046	0.042	0.037	0.033	0.03	0.008
0.29	0.049	0.025	0.025	0.022	0.02	0.018	0.002
0.055	0.025	0.012	0.01	0.01	0.01	0.009	0.019
0.025	0.013	0.005	0.005	0.005	0.005	0.005	0.065
0.015	0.005	0.13	0.079	0.054	0.034	0.023	0.027
0.005	0.002	0.01	0.008	0.007	0.005	0.002	0.017
0.002	0.012	0.12	0.12	0.091	0.084	0.069	0.008
0.018	0.16	0.044	0.041	0.037	0.033	0.03	0.002
0.22	0.049	0.025	0.025	0.022	0.02	0.018	0.019
0.053	0.025	0.011	0.01	0.01	0.01	0.008	0.065
0.025	0.013	0.005	0.005	0.005	0.005	0.005	0.026
0.015	0.005	0.12	0.074	0.051	0.033	0.023	0.017
0.005	0.002	0.01	0.008	0.005	0.005	0.002	0.007
0.002	0.012	0.12	0.11	0.091	0.082	0.069	0.002
0.016	0.15	0.043	0.039	0.036	0.033	0.029	0.018
0.2	0.049						

**RDF # 7*****Non-Bell Peppers except canned, frozen and cured******1996-1998 FDA data - imports only******717 samples, 242 detects******Samples decomposed, 21 data points truncated (at tolerance)******979 data points used ranging from 0.00001 - 0.9655******34% detects******20% imported*****NON-BELL PEPPER**

TOTALZ= 12682

TOTALNZ = 979

TOTALLOD = 749

LODRS = 0.003

0.00001	0.00026	0.00057	0.00093	0.00138	0.00194	0.00261	0.00343
0.00002	0.00027	0.00057	0.00095	0.00140	0.00196	0.00263	0.00345
0.00002	0.00028	0.00058	0.00096	0.00141	0.00197	0.00264	0.00347
0.00003	0.00029	0.00059	0.00096	0.00142	0.00199	0.00267	0.00348
0.00004	0.00029	0.00060	0.00097	0.00143	0.00200	0.00268	0.00350
0.00005	0.00030	0.00060	0.00098	0.00145	0.00202	0.00269	0.00352
0.00005	0.00031	0.00061	0.00100	0.00146	0.00202	0.00272	0.00356
0.00006	0.00031	0.00062	0.00101	0.00147	0.00204	0.00274	0.00358
0.00006	0.00032	0.00063	0.00102	0.00149	0.00206	0.00275	0.00361
0.00007	0.00033	0.00064	0.00103	0.00150	0.00207	0.00276	0.00363
0.00008	0.00033	0.00065	0.00103	0.00151	0.00209	0.00280	0.00365
0.00008	0.00034	0.00066	0.00105	0.00152	0.00211	0.00282	0.00367
0.00009	0.00035	0.00066	0.00105	0.00154	0.00211	0.00283	0.00370
0.00009	0.00035	0.00068	0.00107	0.00155	0.00213	0.00284	0.00372
0.00010	0.00036	0.00069	0.00108	0.00156	0.00215	0.00287	0.00373
0.00010	0.00037	0.00069	0.00108	0.00157	0.00217	0.00289	0.00377
0.00011	0.00038	0.00070	0.00110	0.00158	0.00219	0.00290	0.00378
0.00012	0.00039	0.00071	0.00111	0.00160	0.00220	0.00292	0.00380
0.00012	0.00039	0.00072	0.00112	0.00162	0.00221	0.00294	0.00384
0.00013	0.00039	0.00073	0.00114	0.00163	0.00222	0.00297	0.00386
0.00013	0.00041	0.00073	0.00114	0.00164	0.00224	0.00298	0.00389
0.00014	0.00041	0.00074	0.00115	0.00165	0.00227	0.00301	0.00390
0.00015	0.00042	0.00075	0.00117	0.00167	0.00228	0.00302	0.00393
0.00015	0.00043	0.00077	0.00118	0.00168	0.00230	0.00304	0.00395
0.00016	0.00043	0.00077	0.00119	0.00170	0.00232	0.00306	0.00398
0.00017	0.00044	0.00078	0.00120	0.00171	0.00234	0.00308	0.00399
0.00017	0.00045	0.00079	0.00121	0.00172	0.00235	0.00310	0.00402
0.00018	0.00045	0.00080	0.00122	0.00174	0.00237	0.00313	0.00405
0.00019	0.00046	0.00081	0.00123	0.00175	0.00237	0.00315	0.00407
0.00019	0.00047	0.00081	0.00124	0.00177	0.00240	0.00316	0.00410
0.00020	0.00048	0.00083	0.00125	0.00178	0.00241	0.00320	0.00413
0.00020	0.00048	0.00083	0.00126	0.00180	0.00242	0.00320	0.00414
0.00021	0.00049	0.00084	0.00128	0.00180	0.00245	0.00323	0.00417
0.00022	0.00050	0.00085	0.00129	0.00183	0.00246	0.00326	0.00419
0.00022	0.00051	0.00086	0.00130	0.00183	0.00248	0.00328	0.00422
0.00023	0.00051	0.00087	0.00131	0.00185	0.00250	0.00329	0.00426
0.00023	0.00052	0.00088	0.00133	0.00186	0.00252	0.00331	0.00429
0.00024	0.00053	0.00089	0.00134	0.00188	0.00253	0.00332	0.00430
0.00025	0.00054	0.00090	0.00134	0.00190	0.00256	0.00335	0.00433
0.00025	0.00055	0.00092	0.00136	0.00191	0.00257	0.00338	0.00435
0.00026	0.00056	0.00093	0.00137	0.00192	0.00259	0.00340	0.00439

## ATTACHMENT 1: Residue Distribution Files

0.00441	0.00623	0.00864	0.01193	0.01647	0.02294	0.03254	0.04746
0.00445	0.00627	0.00872	0.01203	0.01657	0.02308	0.03287	0.04778
0.00447	0.00629	0.00873	0.01208	0.01666	0.02332	0.03305	0.04813
0.00450	0.00634	0.00879	0.01213	0.01678	0.02346	0.03317	0.04851
0.00451	0.00638	0.00884	0.01220	0.01684	0.02348	0.03347	0.04873
0.00455	0.00641	0.00891	0.01227	0.01697	0.02365	0.03354	0.04911
0.00456	0.00643	0.00895	0.01232	0.01711	0.02375	0.03384	0.04941
0.00459	0.00649	0.00901	0.01240	0.01721	0.02392	0.03407	0.04997
0.00462	0.00653	0.00904	0.01245	0.01726	0.02408	0.03427	0.05009
0.00467	0.00655	0.00907	0.01257	0.01738	0.02426	0.03436	0.05059
0.00469	0.00657	0.00915	0.01265	0.01744	0.02440	0.03477	0.05096
0.00470	0.00661	0.00917	0.01266	0.01758	0.02451	0.03483	0.05138
0.00474	0.00667	0.00924	0.01276	0.01767	0.02467	0.03501	0.05156
0.00476	0.00669	0.00931	0.01286	0.01777	0.02481	0.03520	0.05208
0.00481	0.00675	0.00935	0.01291	0.01782	0.02491	0.03547	0.05228
0.00481	0.00677	0.00938	0.01300	0.01790	0.02502	0.03573	0.05281
0.00484	0.00680	0.00943	0.01306	0.01802	0.02527	0.03606	0.05307
0.00487	0.00687	0.00949	0.01311	0.01815	0.02541	0.03615	0.05325
0.00492	0.00691	0.00954	0.01317	0.01820	0.02550	0.03651	0.05367
0.00494	0.00694	0.00960	0.01323	0.01835	0.02572	0.03676	0.05401
0.00498	0.00697	0.00968	0.01332	0.01847	0.02588	0.03690	0.05456
0.00500	0.00701	0.00971	0.01341	0.01854	0.02597	0.03715	0.05485
0.00504	0.00705	0.00977	0.01346	0.01864	0.02609	0.03747	0.05528
0.00507	0.00708	0.00983	0.01353	0.01878	0.02633	0.03754	0.05552
0.00508	0.00712	0.00986	0.01366	0.01883	0.02651	0.03778	0.05608
0.00511	0.00718	0.00991	0.01367	0.01899	0.02663	0.03798	0.05640
0.00514	0.00719	0.00996	0.01375	0.01904	0.02682	0.03841	0.05682
0.00518	0.00723	0.01003	0.01382	0.01915	0.02688	0.03865	0.05722
0.00521	0.00727	0.01010	0.01390	0.01932	0.02702	0.03876	0.05788
0.00525	0.00733	0.01014	0.01400	0.01945	0.02722	0.03907	0.05798
0.00526	0.00736	0.01022	0.01408	0.01956	0.02740	0.03920	0.05848
0.00531	0.00743	0.01025	0.01416	0.01960	0.02751	0.03962	0.05892
0.00533	0.00747	0.01034	0.01420	0.01973	0.02769	0.03987	0.05930
0.00537	0.00747	0.01038	0.01430	0.01985	0.02792	0.04010	0.05987
0.00538	0.00754	0.01043	0.01436	0.02002	0.02803	0.04024	0.06009
0.00543	0.00757	0.01048	0.01444	0.02006	0.02826	0.04061	0.06054
0.00547	0.00762	0.01057	0.01454	0.02014	0.02836	0.04094	0.06095
0.00548	0.00765	0.01061	0.01461	0.02033	0.02859	0.04112	0.06145
0.00551	0.00769	0.01068	0.01467	0.02041	0.02879	0.04130	0.06192
0.00555	0.00776	0.01070	0.01482	0.02052	0.02884	0.04169	0.06253
0.00557	0.00779	0.01078	0.01484	0.02066	0.02907	0.04202	0.06307
0.00562	0.00785	0.01084	0.01493	0.02076	0.02917	0.04210	0.06337
0.00564	0.00789	0.01088	0.01501	0.02094	0.02938	0.04234	0.06376
0.00569	0.00792	0.01096	0.01515	0.02103	0.02964	0.04261	0.06427
0.00570	0.00795	0.01099	0.01522	0.02107	0.02971	0.04312	0.06483
0.00574	0.00803	0.01106	0.01529	0.02120	0.02987	0.04324	0.06513
0.00577	0.00805	0.01110	0.01536	0.02141	0.03016	0.04369	0.06584
0.00582	0.00808	0.01117	0.01547	0.02146	0.03026	0.04393	0.06653
0.00586	0.00813	0.01125	0.01554	0.02163	0.03055	0.04419	0.06681
0.00587	0.00820	0.01129	0.01560	0.02177	0.03069	0.04449	0.06744
0.00591	0.00822	0.01139	0.01569	0.02191	0.03093	0.04470	0.06768
0.00595	0.00827	0.01141	0.01581	0.02202	0.03107	0.04511	0.06834
0.00597	0.00834	0.01149	0.01585	0.02205	0.03129	0.04538	0.06869
0.00602	0.00837	0.01158	0.01600	0.02222	0.03139	0.04557	0.06959
0.00607	0.00844	0.01162	0.01608	0.02242	0.03157	0.04583	0.06976
0.00607	0.00849	0.01170	0.01615	0.02249	0.03173	0.04628	0.07044
0.00613	0.00851	0.01173	0.01626	0.02266	0.03196	0.04674	0.07084
0.00615	0.00856	0.01182	0.01634	0.02276	0.03225	0.04695	0.07134
0.00621	0.00860	0.01188	0.01639	0.02282	0.03241	0.04706	0.07236

ATTACHMENT 1: Residue Distribution Files

0.07294	0.09774	0.13861	0.21131	0.36912
0.07327	0.09889	0.13985	0.21243	0.38067
0.07400	0.09962	0.14051	0.21513	0.38674
0.07418	0.10060	0.14326	0.21868	0.39844
0.07522	0.10138	0.14434	0.22075	0.40307
0.07567	0.10285	0.14580	0.22433	0.41284
0.07632	0.10295	0.14715	0.22847	0.42426
0.07668	0.10451	0.14875	0.23121	0.43203
0.07720	0.10536	0.15091	0.23561	0.43851
0.07825	0.10579	0.15161	0.23696	0.44977
0.07849	0.10736	0.15470	0.24291	0.45901
0.07932	0.10853	0.15630	0.24461	0.46580
0.08028	0.10957	0.15660	0.25019	0.48161
0.08065	0.11003	0.15961	0.25170	0.49080
0.08163	0.11103	0.16026	0.25629	0.50357
0.08203	0.11205	0.16256	0.25917	0.52155
0.08231	0.11341	0.16416	0.26385	0.53200
0.08319	0.11469	0.16712	0.26760	0.54168
0.08385	0.11607	0.16795	0.27404	0.56066
0.08496	0.11642	0.16967	0.27902	0.57106
0.08523	0.11734	0.17250	0.27950	0.59524
0.08637	0.11918	0.17350	0.28397	0.60277
0.08704	0.11960	0.17745	0.29259	0.62535
0.08741	0.12120	0.17790	0.29481	0.65209
0.08849	0.12255	0.18108	0.29920	0.66093
0.08880	0.12378	0.18217	0.30583	0.68042
0.08975	0.12481	0.18538	0.30837	0.70412
0.09090	0.12575	0.18749	0.31397	0.72120
0.09156	0.12686	0.18885	0.32034	0.75286
0.09198	0.12875	0.19116	0.32851	0.78423
0.09301	0.12997	0.19380	0.33296	0.81378
0.09412	0.13066	0.19744	0.33713	0.85611
0.09474	0.13319	0.19888	0.34449	0.86488
0.09557	0.13366	0.20168	0.35113	0.89811
0.09604	0.13501	0.20432	0.35721	0.96547
0.09723	0.13613	0.20842	0.36625	

**RDF #8*****Bell Peppers except canned, frozen and cured*****1996-1998 FDA data - imports only****598 samples, 142 detects****Samples decomposed, 21 data points truncated (at tolerance)****979 data points used ranging from 0.00001 - 0.9731****24% detects****20% imported****BELL-PEPPER**

TOTALZ = 17952

TOTALNZ = 979

TOTALLOD = 1469

LODRS = 0.003

0.00001	0.00035	0.00073	0.00118	0.00173	0.00240	0.00320	0.00416
0.00003	0.00036	0.00074	0.00120	0.00175	0.00242	0.00323	0.00419
0.00003	0.00037	0.00075	0.00121	0.00176	0.00244	0.00324	0.00421
0.00004	0.00038	0.00076	0.00122	0.00178	0.00246	0.00327	0.00423
0.00006	0.00038	0.00077	0.00123	0.00178	0.00248	0.00328	0.00425
0.00007	0.00039	0.00078	0.00125	0.00181	0.00249	0.00330	0.00427
0.00008	0.00041	0.00079	0.00126	0.00183	0.00250	0.00332	0.00432
0.00008	0.00041	0.00080	0.00127	0.00183	0.00252	0.00335	0.00434
0.00009	0.00042	0.00081	0.00129	0.00186	0.00255	0.00336	0.00437
0.00010	0.00043	0.00082	0.00130	0.00187	0.00256	0.00338	0.00439
0.00011	0.00044	0.00083	0.00130	0.00189	0.00257	0.00342	0.00442
0.00011	0.00045	0.00084	0.00132	0.00189	0.00260	0.00344	0.00445
0.00012	0.00046	0.00085	0.00133	0.00192	0.00261	0.00346	0.00448
0.00013	0.00046	0.00087	0.00135	0.00193	0.00263	0.00347	0.00451
0.00014	0.00048	0.00088	0.00136	0.00195	0.00265	0.00351	0.00452
0.00014	0.00048	0.00088	0.00137	0.00196	0.00267	0.00352	0.00456
0.00016	0.00049	0.00089	0.00138	0.00197	0.00270	0.00354	0.00458
0.00016	0.00050	0.00090	0.00140	0.00199	0.00271	0.00357	0.00460
0.00017	0.00050	0.00092	0.00141	0.00202	0.00272	0.00359	0.00465
0.00017	0.00051	0.00093	0.00143	0.00203	0.00274	0.00362	0.00467
0.00018	0.00053	0.00093	0.00144	0.00204	0.00276	0.00364	0.00470
0.00019	0.00053	0.00095	0.00145	0.00205	0.00279	0.00368	0.00472
0.00020	0.00054	0.00096	0.00147	0.00208	0.00280	0.00368	0.00475
0.00020	0.00055	0.00098	0.00148	0.00209	0.00282	0.00370	0.00477
0.00022	0.00056	0.00098	0.00150	0.00211	0.00285	0.00373	0.00481
0.00022	0.00057	0.00099	0.00151	0.00212	0.00287	0.00375	0.00482
0.00023	0.00058	0.00101	0.00152	0.00214	0.00289	0.00378	0.00485
0.00023	0.00059	0.00102	0.00153	0.00216	0.00291	0.00381	0.00488
0.00025	0.00060	0.00103	0.00155	0.00218	0.00292	0.00384	0.00491
0.00026	0.00061	0.00103	0.00156	0.00219	0.00295	0.00385	0.00495
0.00026	0.00062	0.00105	0.00157	0.00220	0.00296	0.00389	0.00498
0.00027	0.00063	0.00106	0.00159	0.00223	0.00298	0.00390	0.00500
0.00028	0.00064	0.00107	0.00161	0.00224	0.00300	0.00393	0.00503
0.00029	0.00065	0.00108	0.00162	0.00226	0.00302	0.00396	0.00506
0.00030	0.00066	0.00109	0.00164	0.00227	0.00304	0.00398	0.00509
0.00030	0.00066	0.00111	0.00164	0.00229	0.00307	0.00400	0.00514
0.00031	0.00067	0.00112	0.00166	0.00231	0.00309	0.00402	0.00517
0.00032	0.00069	0.00113	0.00167	0.00232	0.00310	0.00404	0.00518
0.00033	0.00070	0.00114	0.00168	0.00235	0.00313	0.00407	0.00522
0.00033	0.00071	0.00116	0.00170	0.00237	0.00315	0.00410	0.00524
0.00034	0.00072	0.00117	0.00171	0.00238	0.00318	0.00413	0.00528

## ATTACHMENT 1: Residue Distribution Files

0.00531	0.00742	0.01017	0.01390	0.01899	0.02616	0.03668	0.05284
0.00535	0.00746	0.01027	0.01402	0.01910	0.02631	0.03704	0.05318
0.00538	0.00748	0.01028	0.01407	0.01920	0.02658	0.03723	0.05356
0.00541	0.00755	0.01034	0.01413	0.01933	0.02674	0.03737	0.05396
0.00542	0.00759	0.01040	0.01420	0.01940	0.02676	0.03769	0.05420
0.00547	0.00762	0.01048	0.01428	0.01955	0.02695	0.03777	0.05461
0.00549	0.00765	0.01053	0.01434	0.01970	0.02705	0.03810	0.05493
0.00552	0.00772	0.01059	0.01443	0.01981	0.02724	0.03835	0.05554
0.00555	0.00776	0.01063	0.01449	0.01986	0.02741	0.03856	0.05567
0.00561	0.00778	0.01067	0.01462	0.02000	0.02762	0.03866	0.05620
0.00563	0.00781	0.01075	0.01471	0.02007	0.02777	0.03911	0.05660
0.00565	0.00786	0.01078	0.01472	0.02023	0.02788	0.03918	0.05705
0.00569	0.00792	0.01085	0.01484	0.02032	0.02806	0.03936	0.05724
0.00572	0.00794	0.01093	0.01495	0.02044	0.02822	0.03958	0.05781
0.00577	0.00802	0.01098	0.01501	0.02050	0.02833	0.03987	0.05801
0.00578	0.00804	0.01102	0.01511	0.02058	0.02844	0.04016	0.05859
0.00581	0.00807	0.01107	0.01518	0.02072	0.02873	0.04051	0.05886
0.00584	0.00815	0.01114	0.01523	0.02085	0.02887	0.04061	0.05906
0.00590	0.00819	0.01120	0.01530	0.02091	0.02897	0.04100	0.05951
0.00592	0.00823	0.01127	0.01536	0.02107	0.02922	0.04127	0.05988
0.00597	0.00827	0.01136	0.01547	0.02121	0.02939	0.04142	0.06046
0.00599	0.00831	0.01140	0.01557	0.02129	0.02949	0.04170	0.06077
0.00604	0.00836	0.01146	0.01562	0.02140	0.02962	0.04204	0.06123
0.00607	0.00840	0.01152	0.01570	0.02155	0.02989	0.04212	0.06150
0.00609	0.00844	0.01156	0.01585	0.02161	0.03008	0.04237	0.06209
0.00612	0.00850	0.01162	0.01586	0.02179	0.03022	0.04260	0.06243
0.00616	0.00852	0.01168	0.01595	0.02185	0.03043	0.04306	0.06288
0.00620	0.00857	0.01176	0.01603	0.02197	0.03049	0.04332	0.06331
0.00624	0.00861	0.01184	0.01611	0.02215	0.03064	0.04345	0.06402
0.00629	0.00868	0.01188	0.01623	0.02230	0.03086	0.04378	0.06412
0.00630	0.00872	0.01197	0.01632	0.02242	0.03106	0.04392	0.06466
0.00636	0.00879	0.01200	0.01641	0.02246	0.03118	0.04437	0.06513
0.00638	0.00884	0.01210	0.01645	0.02261	0.03138	0.04465	0.06554
0.00643	0.00884	0.01215	0.01656	0.02274	0.03164	0.04489	0.06614
0.00643	0.00892	0.01220	0.01663	0.02293	0.03175	0.04504	0.06638
0.00650	0.00895	0.01226	0.01672	0.02297	0.03201	0.04544	0.06686
0.00654	0.00902	0.01236	0.01683	0.02307	0.03211	0.04580	0.06730
0.00655	0.00905	0.01241	0.01691	0.02328	0.03237	0.04599	0.06783
0.00659	0.00909	0.01249	0.01698	0.02337	0.03259	0.04619	0.06833
0.00664	0.00917	0.01252	0.01714	0.02349	0.03264	0.04661	0.06899
0.00666	0.00921	0.01260	0.01717	0.02364	0.03289	0.04697	0.06956
0.00671	0.00927	0.01267	0.01727	0.02375	0.03300	0.04706	0.06988
0.00673	0.00932	0.01271	0.01736	0.02395	0.03323	0.04731	0.07029
0.00679	0.00936	0.01281	0.01751	0.02405	0.03352	0.04761	0.07084
0.00680	0.00939	0.01284	0.01759	0.02409	0.03359	0.04816	0.07144
0.00686	0.00948	0.01291	0.01767	0.02424	0.03377	0.04828	0.07176
0.00688	0.00951	0.01297	0.01775	0.02447	0.03409	0.04878	0.07251
0.00694	0.00954	0.01304	0.01788	0.02453	0.03419	0.04904	0.07324
0.00699	0.00959	0.01313	0.01795	0.02471	0.03451	0.04932	0.07354
0.00700	0.00968	0.01318	0.01802	0.02487	0.03466	0.04963	0.07421
0.00705	0.00969	0.01330	0.01811	0.02502	0.03493	0.04986	0.07447
0.00709	0.00976	0.01332	0.01825	0.02515	0.03508	0.05030	0.07517
0.00712	0.00983	0.01341	0.01830	0.02518	0.03532	0.05059	0.07554
0.00717	0.00987	0.01350	0.01846	0.02536	0.03543	0.05080	0.07650
0.00723	0.00994	0.01355	0.01855	0.02558	0.03562	0.05109	0.07668
0.00723	0.01000	0.01364	0.01863	0.02567	0.03580	0.05156	0.07741
0.00730	0.01003	0.01367	0.01876	0.02586	0.03605	0.05206	0.07783
0.00732	0.01008	0.01377	0.01884	0.02595	0.03637	0.05228	0.07836
0.00739	0.01013	0.01385	0.01889	0.02603	0.03654	0.05241	0.07944

## ATTACHMENT 1: Residue Distribution Files

0.08006	0.09537	0.11635	0.14380	0.18404	0.24430	0.34310	0.53647
0.08041	0.09651	0.11757	0.14521	0.18506	0.24879	0.34760	0.54687
0.08118	0.09683	0.11866	0.14638	0.18914	0.25017	0.35181	0.55648
0.08137	0.09784	0.11914	0.14895	0.18960	0.25624	0.35923	0.57533
0.08248	0.09905	0.12019	0.15023	0.19288	0.25798	0.36593	0.58564
0.08295	0.09974	0.12126	0.15093	0.19400	0.26366	0.37205	0.60961
0.08364	0.10019	0.12268	0.15378	0.19730	0.26520	0.38115	0.61706
0.08403	0.10127	0.12402	0.15490	0.19948	0.26987	0.38403	0.63940
0.08458	0.10244	0.12546	0.15641	0.20088	0.27281	0.39565	0.66582
0.08568	0.10309	0.12582	0.15782	0.20325	0.27757	0.40175	0.67455
0.08594	0.10397	0.12679	0.15948	0.20597	0.28139	0.41350	0.69378
0.08682	0.10446	0.12871	0.16171	0.20970	0.28793	0.41814	0.71712
0.08784	0.10571	0.12915	0.16243	0.21118	0.29299	0.42794	0.73394
0.08823	0.10625	0.13082	0.16564	0.21406	0.29347	0.43938	0.76508
0.08927	0.10746	0.13223	0.16730	0.21676	0.29801	0.44716	0.79589
0.08969	0.10823	0.13351	0.16760	0.22098	0.30675	0.45364	0.82486
0.08999	0.10926	0.13458	0.17072	0.22393	0.30901	0.46490	0.86631
0.09092	0.11008	0.13557	0.17139	0.22508	0.31345	0.47414	0.87490
0.09162	0.11162	0.13672	0.17377	0.22785	0.32017	0.48092	0.90738
0.09279	0.11172	0.13869	0.17542	0.23149	0.32275	0.49669	0.97312
0.09307	0.11336	0.13996	0.17848	0.23361	0.32841	0.50586	
0.09427	0.11425	0.14068	0.17933	0.23726	0.33485	0.51858	
0.09498	0.11470	0.14332	0.18111	0.24150			

## ATTACHMENT 1: Residue Distribution Files

RDF #9

***Tomatoes -whole - not blended******1996-1997 FDA data - imports only******884 samples, 282 detects******Samples decomposed, 2 data points truncated (at tolerance)******998 data points used ranging from 0.00001 - 1.34******32% detects******27% CT***

## TOMATOES-DECOMPOSITE

TOTALZ = 2121

TOTALNZ = 998

TOTALLOD = 0

LODRS = 0.0022

0.00001	0.00023	0.00044	0.00069	0.00097	0.00131	0.00171	0.00217
0.00002	0.00023	0.00045	0.00069	0.00098	0.00132	0.00172	0.00219
0.00003	0.00024	0.00045	0.00070	0.00099	0.00133	0.00173	0.00220
0.00004	0.00024	0.00046	0.00071	0.00100	0.00134	0.00173	0.00221
0.00004	0.00025	0.00046	0.00071	0.00101	0.00135	0.00175	0.00222
0.00005	0.00025	0.00047	0.00072	0.00102	0.00136	0.00176	0.00224
0.00005	0.00026	0.00048	0.00073	0.00102	0.00136	0.00177	0.00225
0.00006	0.00026	0.00048	0.00074	0.00103	0.00138	0.00177	0.00226
0.00006	0.00026	0.00049	0.00074	0.00104	0.00139	0.00179	0.00226
0.00007	0.00027	0.00049	0.00074	0.00104	0.00139	0.00180	0.00229
0.00007	0.00028	0.00050	0.00075	0.00105	0.00140	0.00181	0.00230
0.00008	0.00028	0.00050	0.00076	0.00106	0.00141	0.00182	0.00231
0.00009	0.00029	0.00051	0.00076	0.00107	0.00142	0.00183	0.00232
0.00009	0.00029	0.00051	0.00077	0.00107	0.00143	0.00184	0.00234
0.00009	0.00030	0.00052	0.00078	0.00108	0.00144	0.00185	0.00235
0.00010	0.00030	0.00053	0.00079	0.00109	0.00144	0.00186	0.00236
0.00011	0.00031	0.00053	0.00080	0.00110	0.00146	0.00188	0.00238
0.00011	0.00031	0.00054	0.00080	0.00111	0.00147	0.00189	0.00238
0.00011	0.00032	0.00054	0.00081	0.00111	0.00148	0.00190	0.00240
0.00012	0.00032	0.00055	0.00081	0.00112	0.00148	0.00191	0.00240
0.00012	0.00033	0.00056	0.00082	0.00113	0.00150	0.00192	0.00243
0.00013	0.00033	0.00056	0.00082	0.00114	0.00150	0.00193	0.00244
0.00013	0.00034	0.00057	0.00083	0.00114	0.00151	0.00194	0.00244
0.00014	0.00034	0.00057	0.00084	0.00115	0.00153	0.00195	0.00246
0.00014	0.00035	0.00058	0.00085	0.00116	0.00153	0.00197	0.00248
0.00015	0.00035	0.00059	0.00086	0.00117	0.00154	0.00198	0.00248
0.00015	0.00036	0.00059	0.00086	0.00118	0.00155	0.00199	0.00250
0.00016	0.00036	0.00060	0.00087	0.00118	0.00156	0.00200	0.00252
0.00016	0.00037	0.00060	0.00088	0.00119	0.00157	0.00201	0.00252
0.00017	0.00037	0.00061	0.00089	0.00120	0.00158	0.00202	0.00254
0.00017	0.00038	0.00061	0.00089	0.00121	0.00158	0.00204	0.00256
0.00018	0.00038	0.00062	0.00089	0.00122	0.00160	0.00204	0.00257
0.00018	0.00039	0.00062	0.00090	0.00122	0.00160	0.00205	0.00258
0.00018	0.00039	0.00063	0.00091	0.00124	0.00161	0.00206	0.00260
0.00019	0.00040	0.00064	0.00091	0.00124	0.00163	0.00208	0.00261
0.00019	0.00040	0.00065	0.00093	0.00125	0.00164	0.00209	0.00262
0.00020	0.00041	0.00065	0.00093	0.00126	0.00164	0.00211	0.00264
0.00021	0.00041	0.00066	0.00094	0.00127	0.00166	0.00211	0.00265
0.00021	0.00042	0.00066	0.00095	0.00128	0.00167	0.00213	0.00266
0.00021	0.00042	0.00067	0.00095	0.00128	0.00168	0.00213	0.00267
0.00022	0.00043	0.00068	0.00096	0.00129	0.00169	0.00215	0.00269
0.00022	0.00044	0.00068	0.00097	0.00130	0.00170	0.00216	0.00271

ATTACHMENT 1: Residue Distribution Files

0.00273	0.00367	0.00491	0.00650	0.00865	0.01159	0.01570	0.02203
0.00274	0.00369	0.00493	0.00652	0.00867	0.01162	0.01585	0.02217
0.00275	0.00371	0.00494	0.00655	0.00870	0.01170	0.01592	0.02224
0.00276	0.00373	0.00497	0.00660	0.00877	0.01176	0.01595	0.02246
0.00277	0.00374	0.00498	0.00662	0.00882	0.01182	0.01610	0.02259
0.00280	0.00376	0.00502	0.00666	0.00885	0.01188	0.01613	0.02269
0.00282	0.00379	0.00505	0.00669	0.00889	0.01193	0.01629	0.02283
0.00283	0.00380	0.00507	0.00671	0.00893	0.01198	0.01634	0.02301
0.00284	0.00382	0.00509	0.00675	0.00899	0.01205	0.01639	0.02309
0.00285	0.00383	0.00512	0.00678	0.00902	0.01211	0.01656	0.02322
0.00287	0.00387	0.00515	0.00682	0.00907	0.01219	0.01660	0.02336
0.00289	0.00388	0.00517	0.00684	0.00910	0.01220	0.01670	0.02353
0.00290	0.00391	0.00520	0.00688	0.00915	0.01226	0.01677	0.02366
0.00292	0.00391	0.00520	0.00692	0.00918	0.01236	0.01691	0.02380
0.00293	0.00393	0.00525	0.00696	0.00923	0.01239	0.01697	0.02394
0.00294	0.00395	0.00525	0.00698	0.00927	0.01246	0.01711	0.02408
0.00296	0.00397	0.00529	0.00703	0.00933	0.01255	0.01716	0.02419
0.00298	0.00399	0.00531	0.00704	0.00937	0.01258	0.01729	0.02435
0.00299	0.00402	0.00534	0.00709	0.00944	0.01268	0.01734	0.02453
0.00300	0.00403	0.00536	0.00710	0.00948	0.01273	0.01747	0.02474
0.00302	0.00406	0.00539	0.00714	0.00953	0.01281	0.01757	0.02493
0.00303	0.00408	0.00543	0.00718	0.00956	0.01285	0.01764	0.02509
0.00304	0.00409	0.00545	0.00723	0.00961	0.01293	0.01780	0.02515
0.00306	0.00410	0.00547	0.00724	0.00966	0.01299	0.01785	0.02537
0.00309	0.00414	0.00550	0.00728	0.00972	0.01307	0.01799	0.02547
0.00310	0.00415	0.00552	0.00732	0.00977	0.01316	0.01802	0.02566
0.00311	0.00418	0.00555	0.00737	0.00981	0.01321	0.01813	0.02577
0.00312	0.00419	0.00558	0.00738	0.00985	0.01328	0.01826	0.02601
0.00314	0.00421	0.00561	0.00742	0.00988	0.01333	0.01839	0.02622
0.00317	0.00423	0.00564	0.00746	0.00994	0.01345	0.01847	0.02638
0.00318	0.00427	0.00566	0.00749	0.00999	0.01351	0.01855	0.02649
0.00319	0.00428	0.00568	0.00755	0.01007	0.01353	0.01870	0.02666
0.00321	0.00431	0.00572	0.00756	0.01009	0.01363	0.01875	0.02681
0.00322	0.00432	0.00573	0.00760	0.01015	0.01367	0.01888	0.02706
0.00323	0.00435	0.00577	0.00764	0.01021	0.01379	0.01901	0.02712
0.00326	0.00437	0.00579	0.00770	0.01025	0.01386	0.01912	0.02740
0.00328	0.00439	0.00583	0.00773	0.01032	0.01395	0.01919	0.02753
0.00329	0.00440	0.00586	0.00776	0.01036	0.01402	0.01932	0.02767
0.00330	0.00443	0.00589	0.00780	0.01041	0.01403	0.01949	0.02787
0.00332	0.00444	0.00591	0.00783	0.01044	0.01415	0.01960	0.02818
0.00333	0.00446	0.00594	0.00788	0.01050	0.01419	0.01964	0.02825
0.00335	0.00448	0.00597	0.00791	0.01059	0.01431	0.01978	0.02838
0.00338	0.00451	0.00599	0.00794	0.01059	0.01437	0.01994	0.02875
0.00339	0.00453	0.00601	0.00797	0.01066	0.01447	0.01999	0.02887
0.00340	0.00457	0.00605	0.00804	0.01071	0.01453	0.02009	0.02900
0.00343	0.00457	0.00607	0.00805	0.01078	0.01463	0.02022	0.02932
0.00345	0.00460	0.00611	0.00812	0.01082	0.01471	0.02035	0.02942
0.00346	0.00462	0.00614	0.00813	0.01089	0.01477	0.02048	0.02963
0.00347	0.00465	0.00616	0.00819	0.01094	0.01479	0.02064	0.02984
0.00350	0.00466	0.00619	0.00822	0.01097	0.01490	0.02069	0.02998
0.00351	0.00469	0.00623	0.00826	0.01107	0.01502	0.02081	0.03031
0.00353	0.00471	0.00627	0.00830	0.01110	0.01505	0.02102	0.03040
0.00356	0.00474	0.00627	0.00836	0.01113	0.01514	0.02113	0.03062
0.00357	0.00476	0.00633	0.00837	0.01123	0.01526	0.02129	0.03077
0.00358	0.00478	0.00635	0.00841	0.01128	0.01533	0.02137	0.03118
0.00360	0.00481	0.00636	0.00846	0.01130	0.01540	0.02146	0.03135
0.00362	0.00484	0.00639	0.00852	0.01140	0.01545	0.02157	0.03143
0.00364	0.00486	0.00643	0.00855	0.01143	0.01555	0.02172	0.03178
0.00366	0.00488	0.00647	0.00860	0.01150	0.01567	0.02185	0.03199

## ATTACHMENT 1: Residue Distribution Files

0.03228	0.03823	0.04662	0.05765	0.07394	0.09916	0.14687	0.26652
0.03251	0.03874	0.04687	0.05802	0.07466	0.10084	0.14903	0.28321
0.03252	0.03883	0.04731	0.05855	0.07511	0.10197	0.15341	0.28819
0.03277	0.03908	0.04784	0.05935	0.07614	0.10470	0.15562	0.30516
0.03310	0.03963	0.04825	0.06004	0.07757	0.10475	0.15814	0.31666
0.03328	0.03992	0.04830	0.06038	0.07788	0.10713	0.16358	0.33254
0.03363	0.04018	0.04899	0.06125	0.07888	0.10918	0.16678	0.34232
0.03392	0.04047	0.04925	0.06171	0.07963	0.10978	0.16896	0.35703
0.03417	0.04085	0.04982	0.06213	0.08057	0.11147	0.17271	0.37344
0.03421	0.04127	0.05019	0.06264	0.08250	0.11410	0.17932	0.39392
0.03461	0.04156	0.05082	0.06384	0.08323	0.11627	0.18312	0.40693
0.03473	0.04188	0.05089	0.06412	0.08355	0.11672	0.18507	0.43798
0.03503	0.04199	0.05140	0.06512	0.08507	0.11870	0.19157	0.46773
0.03520	0.04243	0.05206	0.06574	0.08602	0.12088	0.19748	0.51397
0.03570	0.04277	0.05237	0.06623	0.08700	0.12383	0.20036	0.55228
0.03581	0.04297	0.05276	0.06722	0.08798	0.12488	0.20583	0.56706
0.03614	0.04331	0.05347	0.06801	0.08985	0.12639	0.21356	0.63412
0.03643	0.04398	0.05374	0.06869	0.09041	0.12944	0.21903	0.73148
0.03663	0.04422	0.05451	0.06912	0.09195	0.13213	0.22559	0.76982
0.03692	0.04448	0.05486	0.06964	0.09362	0.13404	0.22808	0.92635
0.03709	0.04486	0.05522	0.07053	0.09402	0.13659	0.23906	1.06906
0.03741	0.04531	0.05573	0.07147	0.09567	0.14010	0.24577	1.34140
0.03766	0.04551	0.05639	0.07208	0.09659	0.14306	0.25038	
0.03806	0.04614	0.05682	0.07291	0.09869	0.14394	0.26423	

## ATTACHMENT 2- Chronic Assessment

U.S. Environmental Protection Agency  
 DEEM Chronic analysis for METHAMIDOPHOS  
 Residue file: C:\MyFiles\Methamidophos (Chronic2).R96  
 Analysis Date 09-15-1999      Residue file dated: 09-15-1999/09:29:08/8  
 Reference dose (RfD) = 0.0001 mg/kg bw/day  
 Comment: All Commodities

Ver. 6.76

1989-92 data

Adjust. #2 used

Food Crop Code	Crop Grp	Food Name	RESIDUE (ppm)	Adj.Factors #1	Comment #2
17	O	Strawberries	0.001300	0.600	0.300 FDA Im
		Full comment: FDA Import			
150	9B	Squash-summer	0.002600	0.770	0.457 FDA Im
		Full comment: FDA Import			
151	9B	Squash-winter	0.002600	0.770	0.457 FDA Im
		Full comment: FDA Import			
155	8	Peppers-sweet(garden)			
		11-Uncooked	0.006400	0.770	0.600 FDA Im
		Full comment: FDA Import			
		12-Cooked: NFS	0.006400	0.595	0.600 FDA Im
		Full comment: FDA Import			
		13-Baked	0.006400	0.595	0.600 FDA Im
		Full comment: FDA Import			
		14-Boiled	0.006400	0.595	0.600 FDA Im
		Full comment: FDA Import			
		31-Canned: NFS	0.006400	0.595	0.600 FDA Im
		Full comment: FDA Import			
		32-Canned: Cooked	0.006400	0.595	0.600 FDA Im
		Full comment: FDA Import			
		34-Canned: Boiled	0.006400	0.595	0.600 FDA Im
		Full comment: FDA Import			
		42-Frozen: Cooked	0.006400	0.595	0.600 FDA Im
		Full comment: FDA Import			
		51-Cured: NFS (smoked/pickled/saltd)	0.006400	0.595	0.600 FDA Im
		Full comment: FDA Import			
156	8	Peppers-chilli incl jalapeno			
		11-Uncooked	0.008800	0.770	0.600 FDA Im
		Full comment: FDA Import			
		12-Cooked: NFS	0.008800	0.595	0.600 FDA Im
		Full comment: FDA Import			
		13-Baked	0.008800	0.595	0.600 FDA Im
		Full comment: FDA Import			
		14-Boiled	0.008800	0.595	0.600 FDA Im
		Full comment: FDA Import			
		15-Fried	0.008800	0.595	0.600 FDA Im
		Full comment: FDA Import			
		31-Canned: NFS	0.008800	0.595	0.600 FDA Im
		Full comment: FDA Import			
		32-Canned: Cooked	0.008800	0.595	0.600 FDA Im
		Full comment: FDA Import			
		33-Canned: Baked	0.008800	0.595	0.600 FDA Im
		Full comment: FDA Import			
		34-Canned: Boiled	0.008800	0.595	0.600 FDA Im
		Full comment: FDA Import			
		42-Frozen: Cooked	0.008800	0.595	0.600 FDA Im
		Full comment: FDA Import			
		51-Cured: NFS (smoked/pickled/saltd)	0.008800	0.595	0.600 FDA Im
		Full comment: FDA Import			
		52-Cured: Cooked(smokd/pickld/saltd)	0.008800	0.595	0.600 FDA Im
		Full comment: FDA Import			
		60-Canned: Cured	0.008800	0.595	0.600 FDA Im
		Full comment: FDA Import			

ATTACHMENT 2- Chronic Assessment

157 8	Peppers-other 11-Uncooked	0.008800	0.770	0.600	FDA	Im
	Full comment: FDA Import					
158 8	Pimientos 12-Cooked: NFS	0.008800	0.595	0.600	Memo	E
	Full comment: Memo Endnote, pg.5					
	14-Boiled	0.008800	0.595	0.600	Memo	E
	Full comment: Memo Endnote, pg.5					
	31-Canned: NFS	0.008800	0.595	0.600	Memo	E
	Full comment: Memo Endnote, pg.5					
	60-Canned: Cured	0.008800	0.595	0.600	Memo	E
	Full comment: Memo Endnote, pg.5					
159 8	Tomatoes-whole 11-Uncooked	0.012000	1.000	0.320	USDA	P
	Full comment: USDA PDP					
	12-Cooked: NFS	0.012000	1.000	0.320	USDA	P
	Full comment: USDA PDP					
	13-Baked	0.012000	1.000	0.320	USDA	P
	Full comment: USDA PDP					
	14-Boiled	0.012000	1.000	0.320	USDA	P
	Full comment: USDA PDP					
	15-Fried	0.012000	1.000	0.320	USDA	P
	Full comment: USDA PDP					
	31-Canned: NFS	0.012000	0.700	0.320	USDA	P
	Full comment: USDA PDP					
	32-Canned: Cooked	0.012000	0.700	0.320	USDA	P
	Full comment: USDA PDP					
	33-Canned: Baked	0.012000	0.700	0.320	USDA	P
	Full comment: USDA PDP					
	34-Canned: Boiled	0.012000	0.700	0.320	USDA	P
	Full comment: USDA PDP					
	42-Frozen: Cooked	0.012000	1.000	0.320	USDA	P
	Full comment: USDA PDP					
160 8	Tomatoes-juice	0.012000	0.900	0.320	USDA	P
	Full comment: USDA PDP					
161 8	Tomatoes-puree	0.012000	3.300	0.320	USDA	P
	Full comment: USDA PDP					
162 8	Tomatoes-paste	0.012000	5.400	0.320	USDA	P
	Full comment: USDA PDP					
163 8	Tomatoes-catsup	0.012000	0.700	0.320	USDA	P
	Full comment: USDA PDP					
207 1C	Potatoes/white-whole 11-Uncooked	0.000440	1.000	0.210	USDA	P
	Full comment: USDA PDP					
	12-Cooked: NFS	0.000440	0.195	0.210	USDA	P
	Full comment: USDA PDP					
	13-Baked	0.000440	0.195	0.210	USDA	P
	Full comment: USDA PDP					
	14-Boiled	0.000440	0.195	0.210	USDA	P
	Full comment: USDA PDP					
	15-Fried	0.000440	10.000	0.210	USDA	P
	Full comment: USDA PDP					
	31-Canned: NFS	0.000440	0.195	0.210	USDA	P
	Full comment: USDA PDP					
208 1C	Potatoes/white-unspecified	0.000440	0.195	0.210	USDA	P
	Full comment: USDA PDP					
209 1C	Potatoes/white-peeled	0.000440	0.195	0.210	USDA	P
	Full comment: USDA PDP					
210 1C	Potatoes/white-dry	0.000440	1.000	0.210	USDA	P
	Full comment: USDA PDP					
211 1C	Potatoes/white-peel only	0.000440	1.000	0.210	USDA	P
	Full comment: USDA PDP					
290 0	Cottonseed-oil	0.000400	1.000	0.010	Field	
	Full comment: Field Trial					
291 0	Cottonseed-meal	0.000400	1.000	0.010	Field	

ATTACHMENT 2- Chronic Assessment

Full comment: Field Trial 415 9B Squash-spaghetti	0.002600	0.770	0.457	FDA	Im
Full comment: FDA Import 416 0 Strawberries-juice	0.001300	1.000	0.300	FDA	Im
Full comment: FDA Import 423 8 Tomatoes-dried	0.012000	14.300	0.320	USDA	P
Full comment: USDA PDP					

## ATTACHMENT 2- Chronic Assessment

U.S. Environmental Protection Agency  
 DEEM Chronic analysis for METHAMIDOPHOS  
 Residue file name: C:\MyFiles\Methamidophos (Chronic2).R96  
 Adjustment factor #2 used.

Ver. 6.76  
 (1989-92 data)

Analysis Date 09-15-1999/09:31:01 Residue file dated: 09-15-1999/09:29:08/8  
 Reference dose (Rfd, CHRONIC) = .0001 mg/kg bw/day

COMMENT 1: All Commodities

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Total exposure by population subgroup

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Population Subgroup	mg/kg body wt/day	Total Exposure Percent of Rfd
U.S. Population (total)	0.000007	6.9%
U.S. Population (spring season)	0.000007	6.5%
U.S. Population (summer season)	0.000007	7.1%
U.S. Population (autumn season)	0.000008	7.5%
U.S. Population (winter season)	0.000007	6.6%
Northeast region	0.000008	7.8%
Midwest region	0.000007	6.8%
Southern region	0.000007	6.8%
Western region	0.000007	6.6%
Hispanics	0.000008	7.9%
Non-hispanic whites	0.000007	7.0%
Non-hispanic blacks	0.000006	5.6%
Non-hisp/non-white/non-black)	0.000008	7.7%
All infants (< 1 year)	0.000004	4.3%
Nursing infants	0.000003	2.8%
Non-nursing infants	0.000005	5.0%
Children 1-6 yrs	0.000015	14.9%
Children 7-12 yrs	0.000011	10.7%
Females 13-19(not preg or nursing)	0.000008	7.6%
Females 20+ (not preg or nursing)	0.000005	4.9%
Females 13-50 yrs	0.000006	5.8%
Females 13+ (preg/not nursing)	0.000005	5.3%
Females 13+ (nursing)	0.000006	6.4%
Males 13-19 yrs	0.000008	7.7%
Males 20+ yrs	0.000006	5.8%
Seniors 55+	0.000004	3.9%
Pacific Region	0.000006	6.3%

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ATTACHMENT 3: Acute Assessment- All Commodities

U.S. Environmental Protection Agency  
 DEEM Acute analysis for METHAMIDOPHOS  
 Residue file name: E:\Methamidophos (Acute4c).R96  
 Analysis Date 09-23-1999  
 Reference dose (aRfD) = 0.001 mg/kg bw/day

Ver. 6.78

1989-92 data

Adjust. #2 used

Residue file dated: 09-23-1999/14:45:34/8

RDF indices and file names for Monte Carlo Analysis

- 1 Potatoes.rdf
- 2 Bell Pepper.rdf
- 3 Non-Bell Peppers.rdf
- 4 Squash.rdf
- 5 Strawberry.rdf
- 6 Tomato.rdf
- 7 Non-Bell Pepper2.rdf
- 8 Bell Pepper 2.rdf
- 9 Tomato2.rdf

Food	Crop		RESIDUE	RDF	Adj. Factors	Code
Grp		Food Name	(ppm)	#	#1	#2
17	0	Strawberries	1.000000	5	0.600	1.000
150	9B	Squash-summer	1.000000	4	0.770	1.000
151	9B	Squash-winter	1.000000	4	0.770	1.000
155	8	Peppers-sweet(garden)				
		11-Uncooked	1.000000	8	0.770	1.000
		12-Cooked: NFS	1.000000	8	0.595	1.000
		13-Baked	1.000000	8	0.595	1.000
		14-Boiled	1.000000	8	0.595	1.000
		31-Canned: NFS	1.000000	2	0.595	1.000
		32-Canned: Cooked	1.000000	2	0.595	1.000
		34-Canned: Boiled	1.000000	2	0.595	1.000
		42-Frozen: Cooked	1.000000	2	0.595	1.000
		51-Cured: NFS (smoked/p	1.000000	2	0.595	1.000
156	8	Peppers-chilli incl jalapeno				
		11-Uncooked	1.000000	7	0.770	1.000
		12-Cooked: NFS	1.000000	7	0.595	1.000
		13-Baked	1.000000	7	0.595	1.000
		14-Boiled	1.000000	7	0.595	1.000
		15-Fried	1.000000	7	0.595	1.000
		31-Canned: NFS	1.000000	3	0.595	1.000
		32-Canned: Cooked	1.000000	3	0.595	1.000
		33-Canned: Baked	1.000000	3	0.595	1.000
		34-Canned: Boiled	1.000000	3	0.595	1.000
		42-Frozen: Cooked	1.000000	3	0.595	1.000
		51-Cured: NFS (smoked/p	1.000000	3	0.595	1.000
		52-Cured: Cooked(smokd/	1.000000	3	0.595	1.000
		60-Canned: Cured	1.000000	3	0.595	1.000
157	8	Peppers-other				
		11-Uncooked	1.000000	7	0.770	1.000
158	8	Pimientos				
		12-Cooked: NFS	1.000000	7	0.595	1.000
		14-Boiled	1.000000	7	0.595	1.000
		31-Canned: NFS	1.000000	3	0.595	1.000
		60-Canned: Cured	1.000000	3	0.595	1.000
159	8	Tomatoes-whole				
		11-Uncooked	2.000000	9	1.000	1.000
		12-Cooked: NFS	2.000000	9	1.000	1.000
		13-Baked	2.000000	9	1.000	1.000
		14-Boiled	2.000000	9	1.000	1.000
		15-Fried	2.000000	9	1.000	1.000
		31-Canned: NFS	2.000000	6	0.700	1.000
		32-Canned: Cooked	2.000000	6	0.700	1.000
		33-Canned: Baked	2.000000	6	0.700	1.000
		34-Canned: Boiled	2.000000	6	0.700	1.000
		42-Frozen: Cooked	2.000000	6	1.000	1.000

ATTACHMENT 3: Acute Assessment- All Commodities

160 8	Tomatoes-juice	2.000000	6	0.900	1.000
161 8	Tomatoes-puree				
	12-Cooked: NFS	0.013500	6	3.300	0.320
	14-Boiled	0.013500	6	3.300	0.320
	31-Canned: NFS	0.013500	6	0.700	0.320
	32-Canned: Cooked	0.013500	6	0.700	0.320
	33-Canned: Baked	0.013500	6	0.700	0.320
	34-Canned: Boiled	0.013500	6	0.700	0.320
	42-Frozen: Cooked	0.013500	6	3.300	0.320
162 8	Tomatoes-paste				
	14-Boiled	0.013500	6	5.400	0.320
	31-Canned: NFS	0.013500	6	0.700	0.320
	32-Canned: Cooked	0.013500	6	0.700	0.320
	33-Canned: Baked	0.013500	6	0.700	0.320
	34-Canned: Boiled	0.013500	6	0.700	0.320
	42-Frozen: Cooked	0.013500	6	5.400	0.320
163 8	Tomatoes-catsup	0.013500	6	0.700	0.320
207 1C	Potatoes/white-whole				
	11-Uncooked	0.100000	1	1.000	1.000
	12-Cooked: NFS	0.100000	1	0.195	1.000
	13-Baked	0.100000	1	0.195	1.000
	14-Boiled	0.100000	1	0.195	1.000
	15-Fried	0.100000	1	10.000	1.000
	31-Canned: NFS	0.100000	1	0.195	1.000
208 1C	Potatoes/white-unspecified	0.100000	1	0.195	1.000
209 1C	Potatoes/white-peeled	0.100000	1	0.195	1.000
210 1C	Potatoes/white-dry	0.000640	0	1.000	0.270
211 1C	Potatoes/white-peel only	0.100000	1	1.000	1.000
290 O	Cottonseed-oil	0.040000	0	1.000	0.010
291 O	Cottonseed-meal	0.040000	0	1.000	0.010
415 9B	Squash-spaghetti	1.000000	4	0.770	1.000
416 O	Strawberries-juice	1.000000	5	1.000	1.000
423 8	Tomatoes-dried	0.013500	6	14.300	0.320

ATTACHMENT 3: Acute Assessment- All Commodities

U.S. Environmental Protection Agency  
 DEEM ACUTE analysis for METHAMIDOPHOS  
 Residue file: Methamidophos (Acute4c).R96  
 Analysis Date: 09-23-1999/16:11:37 Residue file dated: 09-23-1999/14:45:34/8  
 Acute Reference Dose (aRfD) = 0.001000 mg/kg body-wt/day  
 MC iterations = 1000 MC list in residue file MC seed = 10  
 =====

Ver. 6.78  
 (1989-92 data)

Adjustment factor #2 used.

Summary calculations:

	95th Percentile Exposure	% aRfD	99th Percentile Exposure	% aRfD	99.9th Percentile Exposure	% aRfD
U.S. pop - all seasons:						
	0.000023	2.33	0.000113	11.34	0.000546	54.64
All infants (<1 year):						
	0.000011	1.08	0.000044	4.44	0.000374	37.40
Nursing infants (<1 year):						
	0.000000	0.01	0.000052	5.20	0.000469	46.90
Non-nursing infants (<1 yr):						
	0.000013	1.32	0.000052	5.21	0.000350	35.03
Children (1-6 years):						
	0.000038	3.77	0.000160	16.01	0.000724	72.35
Children (7-12 years):						
	0.000035	3.47	0.000144	14.41	0.000691	69.15
Females (13+/preg/not nsg):						
	0.000020	2.00	0.000094	9.39	0.000514	51.40
Females (13+/nursing):						
	0.000018	1.81	0.000086	8.63	0.000439	43.89
Females (13-19 yrs/np/nn):						
	0.000022	2.23	0.000096	9.60	0.000465	46.48
Females (20+ years/np/nn):						
	0.000019	1.88	0.000104	10.35	0.000536	53.60
Females (13-50 years):						
	0.000020	2.02	0.000100	9.95	0.000497	49.66
Males (13-19 years):						
	0.000024	2.37	0.000096	9.59	0.000435	43.47
Males (20+ years):						
	0.000022	2.18	0.000106	10.57	0.000497	49.74

ATTACHMENT 4: Acute Assessment Excluding all Imports

U.S. Environmental Protection Agency  
 DEEM Acute analysis for METHAMIDOPHOS  
 Residue file name: E:\Methamidophos (Acute4c) no imports.R96 Adjust. #2 used  
 Analysis Date 09-24-1999 Residue file dated: 09-24-1999/10:13:01/8  
 Reference dose (aRfD) = 0.001 mg/kg bw/day

RDF indices and file names for Monte Carlo Analysis

- 1 Potatoes.rdf
- 2 Bell Pepper.rdf
- 3 Non-Bell Peppers.rdf
- 4 Squash.rdf
- 5 Strawberry.rdf
- 6 Tomato.rdf
- 7 Non-Bell Pepper2.rdf
- 8 Bell Pepper 2.rdf
- 9 Tomato2.rdf

Food	Crop		RESIDUE	RDF	Adj. Factors	Code
Grp		Food Name	(ppm)	#	#1	#2
159	8	Tomatoes-whole				
		11-Uncooked	2.000000	9	1.000	1.000
		12-Cooked: NFS	2.000000	9	1.000	1.000
		13-Baked	2.000000	9	1.000	1.000
		14-Boiled	2.000000	9	1.000	1.000
		15-Fried	2.000000	9	1.000	1.000
		31-Canned: NFS	2.000000	6	0.700	1.000
		32-Canned: Cooked	2.000000	6	0.700	1.000
		33-Canned: Baked	2.000000	6	0.700	1.000
		34-Canned: Boiled	2.000000	6	0.700	1.000
		42-Frozen: Cooked	2.000000	6	1.000	1.000
160	8	Tomatoes-juice	2.000000	6	0.900	1.000
161	8	Tomatoes-puree				
		12-Cooked: NFS	0.013500	6	3.300	0.320
		14-Boiled	0.013500	6	3.300	0.320
		31-Canned: NFS	0.013500	6	0.700	0.320
		32-Canned: Cooked	0.013500	6	0.700	0.320
		33-Canned: Baked	0.013500	6	0.700	0.320
		34-Canned: Boiled	0.013500	6	0.700	0.320
		42-Frozen: Cooked	0.013500	6	3.300	0.320
162	8	Tomatoes-paste				
		14-Boiled	0.013500	6	5.400	0.320
		31-Canned: NFS	0.013500	6	0.700	0.320
		32-Canned: Cooked	0.013500	6	0.700	0.320
		33-Canned: Baked	0.013500	6	0.700	0.320
		34-Canned: Boiled	0.013500	6	0.700	0.320
		42-Frozen: Cooked	0.013500	6	5.400	0.320
163	8	Tomatoes-catsup	0.013500	6	0.700	0.320
207	1C	Potatoes/white-whole				
		11-Uncooked	0.100000	1	1.000	1.000
		12-Cooked: NFS	0.100000	1	0.195	1.000
		13-Baked	0.100000	1	0.195	1.000
		14-Boiled	0.100000	1	0.195	1.000
		15-Fried	0.100000	1	10.000	1.000
		31-Canned: NFS	0.100000	1	0.195	1.000
208	1C	Potatoes/white-unspecified	0.100000	1	0.195	1.000
209	1C	Potatoes/white-peeled	0.100000	1	0.195	1.000
210	1C	Potatoes/white-dry	0.000640	0	1.000	0.270
211	1C	Potatoes/white-peel only	0.100000	1	1.000	1.000
290	O	Cottonseed-oil	0.040000	0	1.000	0.010
291	O	Cottonseed-meal	0.040000	0	1.000	0.010
423	8	Tomatoes-dried	0.013500	6	14.300	0.320

ATTACHMENT 4: Acute Assessment Excluding all Imports

ATTACHMENT 4: Acute Assessment Excluding all Imports

U.S. Environmental Protection Agency  
 DEEM ACUTE analysis for METHAMIDOPHOS  
 Residue file: Methamidophos (Acute4c) no imports.R96  
 Adjustment factor #2 used.  
 Analysis Date: 09-24-1999/11:05:33 Residue file dated: 09-24-1999/10:13:01/8  
 Acute Reference Dose (aRfD) = 0.001000 mg/kg body-wt/day  
 MC iterations = 1000 MC list in residue file MC seed = 10  
 =====

Summary calculations:

	95th Percentile Exposure	% aRfD	99th Percentile Exposure	% aRfD	99.9th Percentile Exposure	% aRfD
U.S. pop - all seasons:						
	0.000022	2.23	0.000110	11.02	0.000533	53.30
All infants (<1 year):						
	0.000003	0.34	0.000043	4.25	0.000326	32.55
Nursing infants (<1 year):						
	0.000000	0.01	0.000061	6.13	0.000530	52.96
Non-nursing infants (<1 yr):						
	0.000004	0.44	0.000036	3.59	0.000214	21.44
Children (1-6 years):						
	0.000036	3.63	0.000157	15.72	0.000706	70.65
Children (7-12 years):						
	0.000034	3.35	0.000139	13.89	0.000655	65.51
Females (13+/preg/not nsg):						
	0.000019	1.92	0.000096	9.56	0.000503	50.28
Females (13+/nursing):						
	0.000017	1.70	0.000085	8.46	0.000419	41.93
Females (13-19 yrs/np/nn):						
	0.000021	2.13	0.000094	9.42	0.000457	45.70
Females (20+ years/np/nn):						
	0.000018	1.79	0.000100	10.01	0.000527	52.73
Females (13-50 years):						
	0.000019	1.93	0.000097	9.69	0.000482	48.17
Males (13-19 years):						
	0.000023	2.27	0.000095	9.45	0.000431	43.11
Males (20+ years):						
	0.000021	2.09	0.000102	10.24	0.000488	48.76

ATTACHMENT 4: Acute Assessment Excluding all Imports

U.S. Environmental Protection Agency  
 DEEM Acute analysis for METHAMIDOPHOS  
 Residue file name: E:\\$notom.R96  
 Analysis Date 09-28-1999                    Residue file dated: 09-28-1999/14:46:07/8  
 Reference dose (aRfD) = 0.001 mg/kg bw/day

Ver. 6.78  
 1989-92 data  
 Adjust. #2 used

RDF indices and file names for Monte Carlo Analysis

- 1 Potatoes.rdf
- 2 Bell Pepper.rdf
- 3 Non-Bell Peppers.rdf
- 4 Squash.rdf
- 5 Strawberry.rdf
- 6 Tomato.rdf
- 7 Non-Bell Pepper2.rdf
- 8 Bell Pepper 2.rdf
- 9 Tomato2.rdf

Food	Crop		RESIDUE	RDF	Adj.Factors	Code
Grp		Food Name	(ppm)	#	#1	#2
17	0	Strawberries	1.000000	5	0.600	1.000
150	9B	Squash-summer	1.000000	4	0.770	1.000
151	9B	Squash-winter	1.000000	4	0.770	1.000
155	8	Peppers-sweet(garden)				
		11-Uncooked	1.000000	8	0.770	1.000
		12-Cooked: NFS	1.000000	8	0.595	1.000
		13-Baked	1.000000	8	0.595	1.000
		14-Boiled	1.000000	8	0.595	1.000
		31-Canned: NFS	1.000000	2	0.595	1.000
		32-Canned: Cooked	1.000000	2	0.595	1.000
		34-Canned: Boiled	1.000000	2	0.595	1.000
		42-Frozen: Cooked	1.000000	2	0.595	1.000
		51-Cured: NFS (smoked/p	1.000000	2	0.595	1.000
156	8	Peppers-chilli incl jalapeno				
		11-Uncooked	1.000000	7	0.770	1.000
		12-Cooked: NFS	1.000000	7	0.595	1.000
		13-Baked	1.000000	7	0.595	1.000
		14-Boiled	1.000000	7	0.595	1.000
		15-Fried	1.000000	7	0.595	1.000
		31-Canned: NFS	1.000000	3	0.595	1.000
		32-Canned: Cooked	1.000000	3	0.595	1.000
		33-Canned: Baked	1.000000	3	0.595	1.000
		34-Canned: Boiled	1.000000	3	0.595	1.000
		42-Frozen: Cooked	1.000000	3	0.595	1.000
		51-Cured: NFS (smoked/p	1.000000	3	0.595	1.000
		52-Cured: Cooked(smokd/	1.000000	3	0.595	1.000
		60-Canned: Cured	1.000000	3	0.595	1.000
157	8	Peppers-other				
		11-Uncooked	1.000000	7	0.770	1.000
158	8	Pimientos				
		12-Cooked: NFS	1.000000	7	0.595	1.000
		14-Boiled	1.000000	7	0.595	1.000
		31-Canned: NFS	1.000000	3	0.595	1.000
		60-Canned: Cured	1.000000	3	0.595	1.000
207	1C	Potatoes/white-whole				
		11-Uncooked	0.100000	1	1.000	1.000
		12-Cooked: NFS	0.100000	1	0.195	1.000
		13-Baked	0.100000	1	0.195	1.000
		14-Boiled	0.100000	1	0.195	1.000
		15-Fried	0.100000	1	10.000	1.000
		31-Canned: NFS	0.100000	1	0.195	1.000
208	1C	Potatoes/white-unspecified	0.100000	1	0.195	1.000
209	1C	Potatoes/white-peeled	0.100000	1	0.195	1.000

ATTACHMENT 5: Acute Assessment Excluding Tomatoes

210 1C	Potatoes/white-dry	0.000640	0	1.000	0.270
211 1C	Potatoes/white-peel only	0.100000	1	1.000	1.000
290 O	Cottonseed-oil	0.040000	0	1.000	0.010
291 O	Cottonseed-meal	0.040000	0	1.000	0.010
415 9B	Squash-spaghetti	1.000000	4	0.770	1.000
416 O	Strawberries-juice	1.000000	5	1.000	1.000

U.S. Environmental Protection Agency  
DEEM ACUTE analysis for METHAMIDOPHOS

Ver. 6.78  
(1989-92 data)

Adjustment factor #2 used.

Residue file: \$notom.R96  
Analysis Date: 09-28-1999/15:33:14 Residue file dated: 09-28-1999/14:46:07/8  
Acute Reference Dose (aRfD) = 0.001000 mg/kg body-wt/day  
MC iterations = 1000 MC list in residue file MC seed = 10

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Summary calculations:

	95th Percentile Exposure	% aRfD	99th Percentile Exposure	% aRfD	99.9th Percentile Exposure	% aRfD
----- ----- ----- ----- ----- ----- -----						
U.S. pop - all seasons:						
	0.000001	0.11	0.000006	0.63	0.000061	6.05
All infants (<1 year):						
	0.000001	0.08	0.000018	1.82	0.000050	5.02
Nursing infants (<1 year):						
	0.000000	0.00	0.000001	0.08	0.000003	0.34
Non-nursing infants (<1 yr):						
	0.000001	0.14	0.000024	2.40	0.000136	13.64
Children (1-6 years):						
	0.000002	0.18	0.000010	1.03	0.000106	10.63
Children (7-12 years):						
	0.000001	0.14	0.000009	0.94	0.000092	9.18
Females (13+/preg/not nsg):						
	0.000001	0.08	0.000006	0.58	0.000036	3.64
Females (13+/nursing):						
	0.000002	0.16	0.000007	0.69	0.000056	5.61
Females (13-19 yrs/np/nn):						
	0.000001	0.09	0.000005	0.45	0.000040	4.03
Females (20+ years/np/nn):						
	0.000001	0.09	0.000006	0.56	0.000042	4.19
Females (13-50 years):						
	0.000001	0.09	0.000006	0.56	0.000043	4.31
Males (13-19 years):						
	0.000001	0.11	0.000005	0.50	0.000037	3.69
Males (20+ years):						
	0.000001	0.10	0.000005	0.54	0.000052	5.16

ATTACHMENT 6: Aggregate Chronic Assessment

U.S. Environmental Protection Agency  
 DEEM Chronic analysis for METHAMIDOPHOS  
 Residue file: E:\methaggchronic3.R96  
 Analysis Date 09-28-1999      Residue file dated: 09-28-1999/14:53:15/8  
 Reference dose (RfD) = 0.0001 mg/kg bw/day  
 Comment: Aggreg Chronic Analysis - Reregistration File . HAZID report dated 2/21/98

Food	Crop	Code	Grp	Food Name	RESIDUE (ppm)	Adj. Factors	
						#1	#2
8	O	Cranberries			0.100000	0.770	0.340
9	O	Cranberries-juice			0.100000	1.100	0.340
17	O	Strawberries			0.001300	0.600	0.300
46	14	Macadamia nuts (bush nuts)			0.010000	1.000	0.010
150	9B	Squash-summer			0.002600	0.770	0.457
151	9B	Squash-winter			0.002600	0.770	0.457
155	8	Peppers-sweet(garden)					
		11-Uncooked			0.006400	0.770	0.240
		12-Cooked: NFS			0.006400	0.595	0.240
		13-Baked			0.006400	0.595	0.240
		14-Boiled			0.006400	0.595	0.240
		31-Canned: NFS			0.006400	0.595	0.240
		32-Canned: Cooked			0.006400	0.595	0.240
		34-Canned: Boiled			0.006400	0.595	0.240
		42-Frozen: Cooked			0.006400	0.595	0.240
		51-Cured: NFS (smoked/pickled/saltd)			0.006400	0.595	0.240
156	8	Peppers-chilli incl jalapeno					
		11-Uncooked			0.008800	0.770	0.240
		12-Cooked: NFS			0.008800	0.595	0.240
		13-Baked			0.008800	0.595	0.240
		14-Boiled			0.008800	0.595	0.240
		15-Fried			0.008800	0.595	0.240
		31-Canned: NFS			0.008800	0.770	0.240
		32-Canned: Cooked			0.008800	0.595	0.240
		33-Canned: Baked			0.008800	0.595	0.240
		34-Canned: Boiled			0.008800	0.595	0.240
		42-Frozen: Cooked			0.008800	0.595	0.240
		51-Cured: NFS (smoked/pickled/saltd)			0.008800	0.595	0.240
		52-Cured: Cooked(smokd/pickld/saltd)			0.008800	0.595	0.240
157	8	Peppers-other			0.008800	0.595	0.240
159	8	Tomatoes-whole					
		11-Uncooked			0.012000	1.000	0.320
		12-Cooked: NFS			0.012000	1.000	0.320
		13-Baked			0.012000	1.000	0.320
		14-Boiled			0.012000	1.000	0.320
		15-Fried			0.012000	1.000	0.320
		31-Canned: NFS			0.012000	0.700	0.320
		32-Canned: Cooked			0.012000	0.700	0.320
		33-Canned: Baked			0.012000	0.700	0.320
		34-Canned: Boiled			0.012000	0.700	0.320
		42-Frozen: Cooked			0.012000	0.700	0.320
160	8	Tomatoes-juice			0.012000	0.900	0.320
161	8	Tomatoes-puree			0.012000	3.300	0.320
162	8	Tomatoes-paste			0.012000	5.400	0.320
163	8	Tomatoes-catsup			0.012000	0.700	0.320
166	4B	Celery			0.090000	0.770	0.490
169	5A	Brussels sprouts					
		14-Boiled			0.050000	0.535	0.110
		42-Frozen: Cooked			0.050000	0.535	0.110
171	5A	Cauliflower					

ATTACHMENT 6: Aggregate Chronic Assessment

	11-Uncooked	0.130000	0.770	0.110
	12-Cooked: NFS	0.130000	0.535	0.110
	14-Boiled	0.130000	0.535	0.110
	15-Fried	0.130000	0.535	0.110
	42-Frozen: Cooked	0.130000	0.535	0.110
192 4A	Lettuce-head varieties	0.100000	0.770	0.470
207 1C	Potatoes/white-whole			
	11-Uncooked	0.000440	1.000	0.210
	12-Cooked: NFS	0.000440	0.195	0.210
	13-Baked	0.000440	0.195	0.210
	14-Boiled	0.000440	0.195	0.210
	15-Fried	0.000440	10.000	0.210
	31-Canned: NFS	0.000440	0.195	0.210
208 1C	Potatoes/white-unspecified	0.000440	0.195	0.210
209 1C	Potatoes/white-peeled	0.000440	0.195	0.210
210 1C	Potatoes/white-dry	0.000440	1.000	0.210
211 1C	Potatoes/white-peel only	0.000440	1.000	0.210
227 6C	Beans-dry-great northern	0.160000	0.770	0.020
228 6C	Beans-dry-kidney			
	12-Cooked: NFS	0.050000	0.638	0.020
	13-Baked	0.050000	0.638	0.020
	14-Boiled	0.050000	0.638	0.020
	32-Canned: Cooked	0.030000	0.697	0.020
	34-Canned: Boiled	0.030000	0.697	0.020
	42-Frozen: Cooked	0.050000	0.638	0.020
229 6C	Beans-dry-lima			
	14-Boiled	0.050000	0.638	0.020
	32-Canned: Cooked	0.030000	0.697	0.020
230 6C	Beans-dry-navy (pea)			
	32-Canned: Cooked	0.030000	0.697	0.020
	34-Canned: Boiled	0.030000	0.697	0.020
231 6C	Beans-dry-other			
	12-Cooked: NFS	0.050000	0.638	0.020
	13-Baked	0.050000	0.638	0.020
	14-Boiled	0.050000	0.638	0.020
	15-Fried	0.050000	0.638	0.020
	34-Canned: Boiled	0.030000	0.697	0.020
232 6C	Beans-dry-pinto			
	12-Cooked: NFS	0.050000	0.638	0.020
	13-Baked	0.050000	0.638	0.020
	14-Boiled	0.050000	0.638	0.020
	15-Fried	0.050000	0.638	0.020
	32-Canned: Cooked	0.030000	0.697	0.020
	42-Frozen: Cooked	0.050000	0.638	0.020
233 6B	Beans-succulent-lima			
	11-Uncooked	0.160000	0.770	0.290
	12-Cooked: NFS	0.050000	0.638	0.290
	14-Boiled	0.050000	0.638	0.290
	32-Canned: Cooked	0.030000	0.697	0.350
	42-Frozen: Cooked	0.050000	0.638	0.350
	44-Frozen: Boiled	0.050000	0.638	0.350
234 6A	Beans-succulent-green			
	11-Uncooked	0.160000	0.770	0.290
	12-Cooked: NFS	0.050000	0.638	0.290
	14-Boiled	0.050000	0.638	0.290
	31-Canned: NFS	0.030000	0.697	0.350
	32-Canned: Cooked	0.030000	0.697	0.350
	34-Canned: Boiled	0.030000	0.697	0.350
	42-Frozen: Cooked	0.050000	0.638	0.350
	44-Frozen: Boiled	0.050000	0.638	0.350
	51-Cured: NFS (smoked/pickled/saltd)	0.050000	0.638	0.350
235 6A	Beans-succulent-other			
	34-Canned: Boiled	0.030000	0.697	0.350
236 6A	Beans-succulent-yellow/wax			

ATTACHMENT 6: Aggregate Chronic Assessment

	14-Boiled	0.050000	0.638	0.290
	32-Canned: Cooked	0.030000	0.697	0.350
	42-Frozen: Cooked	0.030000	0.638	0.350
249 6C	Beans-dry-broadbeans			
	14-Boiled	0.050000	0.638	0.020
250 6B	Beans-succulent-broadbeans	0.160000	0.770	0.290
251 6C	Beans-dry-pigeon beans	0.160000	0.770	0.020
253 6	Beans-unspecified	0.160000	0.770	0.290
255 6A	Soybeans-sprouted seeds	1.000000	0.330	0.010
256	Beans-dry-hyacinth	0.160000	0.770	0.020
257	Beans-succulent-hyacinth	0.160000	0.770	0.290
258 6C	Beans-dry-blackeye peas/cowpea			
	14-Boiled	0.050000	0.638	0.020
259 6C	Beans-dry-garbanzo/chick pea			
	12-Cooked: NFS	0.050000	0.638	0.020
	14-Boiled	0.050000	0.638	0.020
	15-Fried	0.050000	0.638	0.020
	32-Canned: Cooked	0.030000	0.697	0.020
290 O	Cottonseed-oil	0.000400	1.000	0.090
291 O	Cottonseed-meal	0.000400	1.000	0.090
293 O	Peanuts-oil	0.010000	1.000	0.050
297 6A	Soybeans-oil	1.000000	1.000	0.010
303 6A	Soybean-other	1.000000	0.770	0.010
304 6A	Soybeans-mature seeds dry	1.000000	0.770	0.010
305 6A	Soybeans-flour (full fat)	1.000000	1.000	0.010
306 6A	Soybeans-flour (low fat)	1.000000	1.000	0.010
307 6A	Soybeans-flour (defatted)	1.000000	1.000	0.010
310 O	Peppermint	2.000000	0.770	0.310
311 O	Peppermint-oil	2.000000	1.000	0.310
312 O	Spearmint	2.000000	0.770	0.310
313 O	Spearmint-oil	2.000000	1.000	0.310
384 4B	Celery juice	0.090000	1.000	0.490
389 O	Cranberries-juice-concentrate	0.100000	3.300	0.340
403 O	Peanuts-butter	0.010000	1.890	0.050
415 9B	Squash-spaghetti	0.002600	0.770	0.457
416 O	Strawberries-juice	0.001300	1.000	0.300
423 8	Tomatoes-dried	0.012000	14.300	0.320
467 19B	Celery seed	0.090000	1.000	0.490
482 O	Soybeans-protein isolate	1.000000	1.000	0.010
940 O	Peanuts-hulled	0.010000	1.000	0.050

ATTACHMENT 6: Aggregate Chronic Assessment

U.S. Environmental Protection Agency  
 DEEM Chronic analysis for METHAMIDOPHOS  
 Residue file name: E:\methaggchronic3.R96  
 Analysis Date 09-28-1999/14:55:24      Residue file dated: 09-28-1999/14:53:15/8  
 Reference dose (RfD, CHRONIC) = .0001 mg/kg bw/day  
 COMMENT 1: Aggreg Chronic Analysis - Reregistration File . HAZID report dated  
 2/21/98

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Total exposure by population subgroup

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Population Subgroup	Total Exposure	
	mg/kg body wt/day	Percent of Rfd
U.S. Population (total)	0.000023	23.0%
U.S. Population (spring season)	0.000023	23.1%
U.S. Population (summer season)	0.000022	22.5%
U.S. Population (autumn season)	0.000023	22.7%
U.S. Population (winter season)	0.000024	23.8%
Northeast region	0.000024	24.3%
Midwest region	0.000022	21.5%
Southern region	0.000022	22.5%
Western region	0.000024	24.4%
Hispanics	0.000024	23.8%
Non-hispanic whites	0.000024	23.7%
Non-hispanic blacks	0.000018	18.4%
Non-hisp/non-white/non-black)	0.000021	21.5%
All infants (< 1 year)	0.000031	31.1%
Nursing infants	0.000009	9.5%
Non-nursing infants	0.000040	40.2%
Children 1-6 yrs	0.000037	36.9%
Children 7-12 yrs	0.000030	30.2%
Females 13-19(not preg or nursing)	0.000021	21.4%
Females 20+ (not preg or nursing)	0.000020	20.4%
Females 13-50 yrs	0.000021	21.2%
Females 13+ (preg/not nursing)	0.000019	19.2%
Females 13+ (nursing)	0.000025	25.4%
Males 13-19 yrs	0.000022	21.9%
Males 20+ yrs	0.000020	19.9%
Seniors 55+	0.000019	18.6%
Pacific Region	0.000024	24.3%

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ATTACHMENT 7: Aggregate Acute Assessment - All Commodities

U.S. Environmental Protection Agency  
 DEEM Acute analysis for METHAMIDOPHOS/ACEPHATE  
 Residue file name: E:\methagggregfin.R96  
 Analysis Date 09-28-1999                  Residue file dated: 09-24-1999/16:45:03/8  
 Reference dose (aRfD) = 0.001 mg/kg bw/day  
 Comment: Methamidophos from methamidophos use

RDF indices and file names for Monte Carlo Analysis

1 methsbean.rdf  
 2 methsbeanpro.rdf  
 3 methbrsprout.rdf  
 4 methcaulif.rdf  
 5 methcelhan.rdf  
 6 methceleryfrz.rdf  
 7 methcranberr.rdf  
 8 methlettans.rdf  
 9 macadami.rdf  
 10 methnonbellpepperhan.rdf  
 11 methnonpepfroz.rdf  
 12 methbellpepperhan.rdf  
 13 methbellpepfroz.rdf  
 14 Potatoes.rdf  
 15 Squash.rdf  
 16 Strawberry.rdf  
 17 Tomato.rdf  
 18 Tomato2.rdf

Food	Crop		RESIDUE	RDF	Adj.	Factors	Code
Grp		Food Name	(ppm)	#	#1	#2	
8	0	Cranberries	0.500000	7	1.000	1.000	
9	0	Cranberries-juice	0.500000	7	1.100	1.000	
17	0	Strawberries	1.000000	16	0.600	1.000	
46	14	Macadamia nuts (bush nuts)	0.050000	9	1.000	1.000	
150	9B	Squash-summer	1.000000	15	0.770	1.000	
151	9B	Squash-winter	1.000000	15	0.770	1.000	
155	8	Peppers-sweet(garden)					
		11-Uncooked	4.000000	12	0.770	1.000	
		12-Cooked: NFS	4.000000	12	0.595	1.000	
		13-Baked	4.000000	12	0.595	1.000	
		14-Boiled	4.000000	12	0.595	1.000	
		31-Canned: NFS	4.000000	13	0.595	1.000	
		32-Canned: Cooked	4.000000	13	0.595	1.000	
		34-Canned: Boiled	4.000000	13	0.595	1.000	
		42-Frozen: Cooked	4.000000	13	0.595	1.000	
		51-Cured: NFS (smoked/p	4.000000	13	0.595	1.000	
156	8	Peppers-chilli incl jalapeno					
		11-Uncooked	4.000000	10	0.770	1.000	
		12-Cooked: NFS	4.000000	10	0.595	1.000	
		13-Baked	4.000000	10	0.595	1.000	
		14-Boiled	4.000000	10	0.595	1.000	
		15-Fried	4.000000	10	0.595	1.000	
		31-Canned: NFS	4.000000	11	0.595	1.000	
		32-Canned: Cooked	4.000000	11	0.595	1.000	
		33-Canned: Baked	4.000000	11	0.595	1.000	
		34-Canned: Boiled	4.000000	11	0.595	1.000	
		42-Frozen: Cooked	4.000000	11	0.595	1.000	
		51-Cured: NFS (smoked/p	4.000000	11	0.595	1.000	
		52-Cured: Cooked(smokd/	4.000000	11	0.595	1.000	
		60-Canned: Cured	4.000000	11	0.595	1.000	
157	8	Peppers-other					
		11-Uncooked	4.000000	10	0.770	1.000	
158	8	Pimientos					
		12-Cooked: NFS	4.000000	10	0.595	1.000	

ATTACHMENT 7: Aggregate Acute Assessment - All Commodities

		14-Boiled	4.000000	10	0.595	1.000
		31-Canned: NFS	4.000000	11	0.595	1.000
		60-Canned: Cured	4.000000	11	0.595	1.000
159	8	Tomatoes-whole				
		11-Uncooked	2.000000	18	1.000	1.000
		12-Cooked: NFS	2.000000	18	1.000	1.000
		13-Baked	2.000000	18	1.000	1.000
		14-Boiled	2.000000	18	1.000	1.000
		15-Fried	2.000000	18	1.000	1.000
		31-Canned: NFS	2.000000	17	0.700	1.000
		32-Canned: Cooked	2.000000	17	0.700	1.000
		33-Canned: Baked	2.000000	17	0.700	1.000
		34-Canned: Boiled	2.000000	17	0.700	1.000
		42-Frozen: Cooked	2.000000	17	1.000	1.000
160	8	Tomatoes-juice	2.000000	17	0.900	1.000
161	8	Tomatoes-puree				
		12-Cooked: NFS	2.000000	17	3.300	1.000
		14-Boiled	2.000000	17	3.300	1.000
		31-Canned: NFS	2.000000	17	0.700	1.000
		32-Canned: Cooked	2.000000	17	0.700	1.000
		33-Canned: Baked	2.000000	17	0.700	1.000
		34-Canned: Boiled	2.000000	17	0.700	1.000
		42-Frozen: Cooked	2.000000	17	3.300	1.000
162	8	Tomatoes-paste				
		14-Boiled	2.000000	17	5.400	1.000
		31-Canned: NFS	2.000000	17	0.700	1.000
		32-Canned: Cooked	2.000000	17	0.700	1.000
		33-Canned: Baked	2.000000	17	0.700	1.000
		34-Canned: Boiled	2.000000	17	0.700	1.000
		42-Frozen: Cooked	2.000000	17	0.700	1.000
163	8	Tomatoes-catsup	2.000000	17	0.700	1.000
166	4B	Celery				
		11-Uncooked	10.000000	5	0.770	1.000
		12-Cooked: NFS	10.000000	5	0.535	1.000
		13-Baked	10.000000	5	0.535	1.000
		14-Boiled	10.000000	5	0.535	1.000
		15-Fried	10.000000	5	0.535	1.000
		31-Canned: NFS	10.000000	6	0.535	1.000
		32-Canned: Cooked	10.000000	6	0.535	1.000
		34-Canned: Boiled	10.000000	6	0.535	1.000
		42-Frozen: Cooked	10.000000	6	0.535	1.000
169	5A	Brussels sprouts				
		14-Boiled	3.000000	3	0.535	1.000
		42-Frozen: Cooked	3.000000	3	0.535	1.000
171	5A	Cauliflower				
		11-Uncooked	2.000000	4	0.770	1.000
		12-Cooked: NFS	2.000000	4	0.535	1.000
		14-Boiled	2.000000	4	0.535	1.000
		15-Fried	2.000000	4	0.535	1.000
		42-Frozen: Cooked	2.000000	4	0.535	1.000
192	4A	Lettuce-head varieties				
		11-Uncooked	10.000000	8	1.000	1.000
207	1C	Potatoes/white-whole				
		11-Uncooked	0.100000	14	1.000	1.000
		12-Cooked: NFS	0.100000	14	0.195	1.000
		13-Baked	0.100000	14	0.195	1.000
		14-Boiled	0.100000	14	0.195	1.000
		15-Fried	0.100000	14	10.000	1.000
		31-Canned: NFS	0.100000	14	0.195	1.000
208	1C	Potatoes/white-unspecified	0.100000	14	0.195	1.000
209	1C	Potatoes/white-peeled	0.100000	14	0.195	1.000
210	1C	Potatoes/white-dry	0.000170	0	6.500	1.000
211	1C	Potatoes/white-peel only	0.100000	14	1.000	1.000
227	6C	Beans-dry-great northern				
		32-Canned: Cooked	0.000250	0	0.697	1.000

ATTACHMENT 7: Aggregate Acute Assessment - All Commodities

228	6C	Beans-dry-kidney					
		12-Cooked: NFS	0.000250	0	0.638	1.000	
		13-Baked	0.000250	0	0.638	1.000	
		14-Boiled	0.000250	0	0.638	1.000	
		32-Canned: Cooked	0.000250	0	0.697	1.000	
		34-Canned: Boiled	0.000250	0	0.697	1.000	
		42-Frozen: Cooked	0.000250	0	0.638	1.000	
229	6C	Beans-dry-lima					
		14-Boiled	0.000250	0	0.638	1.000	
		32-Canned: Cooked	0.000250	0	0.697	1.000	
230	6C	Beans-dry-navy (pea)					
		32-Canned: Cooked	0.000250	0	0.697	1.000	
		34-Canned: Boiled	0.000250	0	0.697	1.000	
231	6C	Beans-dry-other					
232	6C	Beans-dry-pinto					
		12-Cooked: NFS	0.000250	0	0.638	1.000	
		13-Baked	0.000250	0	0.638	1.000	
		14-Boiled	0.000250	0	0.638	1.000	
		15-Fried	0.000250	0	0.638	1.000	
		32-Canned: Cooked	0.000250	0	0.697	1.000	
		42-Frozen: Cooked	0.000250	0	0.638	1.000	
233	6B	Beans-succulent-lima					
		11-Uncooked	3.000000	1	1.000	1.000	
		12-Cooked: NFS	3.000000	1	0.638	1.000	
		14-Boiled	3.000000	1	0.638	1.000	
		32-Canned: Cooked	3.000000	2	0.697	1.000	
		42-Frozen: Cooked	3.000000	2	0.638	1.000	
		44-Frozen: Boiled	3.000000	2	0.638	1.000	
234	6A	Beans-succulent-green					
		11-Uncooked	3.000000	1	1.000	1.000	
		12-Cooked: NFS	3.000000	1	0.638	1.000	
		14-Boiled	3.000000	1	0.638	1.000	
		31-Canned: NFS	3.000000	2	0.697	1.000	
		32-Canned: Cooked	3.000000	2	0.697	1.000	
		34-Canned: Boiled	3.000000	2	0.697	1.000	
		42-Frozen: Cooked	3.000000	2	0.638	1.000	
		44-Frozen: Boiled	3.000000	2	0.638	1.000	
		51-Cured: NFS (smoked/p	3.000000	2	0.638	1.000	
235	6A	Beans-succulent-other					
		34-Canned: Boiled	3.000000	2	0.697	1.000	
236	6A	Beans-succulent-yellow/wax					
		14-Boiled	3.000000	1	0.638	1.000	
		32-Canned: Cooked	3.000000	2	0.697	1.000	
		42-Frozen: Cooked	3.000000	2	0.697	1.000	
249	6C	Beans-dry-broadbeans					
		14-Boiled	0.000250	0	0.638	1.000	
250	6B	Beans-succulent-broadbeans					
			3.000000	1	1.000	1.000	
251	6C	Beans-dry-pigeon beans					
			0.000250	0	0.770	1.000	
253	6	Beans-unspecified					
			3.000000	1	1.000	1.000	
255	6A	Soybeans-sprouted seeds					
			0.000080	0	1.000	1.000	
256	6C	Beans-dry-hyacinth					
			0.000250	0	0.770	1.000	
257	6	Beans-succulent-hyacinth					
			3.000000	1	1.000	1.000	
258	6C	Beans-dry-blackeye peas/cowpea					
		14-Boiled	0.000250	0	0.638	1.000	
259	6C	Beans-dry-garbanzo/chick pea					
		12-Cooked: NFS	0.000250	0	0.638	1.000	
		14-Boiled	0.000250	0	0.638	1.000	
		15-Fried	0.000250	0	0.638	1.000	
		32-Canned: Cooked	0.000250	0	0.697	1.000	
290	O	Cottonseed-oil					
			0.003900	0	1.000	1.000	
291	O	Cottonseed-meal					
			0.003900	0	1.000	1.000	
293	O	Peanuts-oil					
			0.001000	0	1.000	1.000	
297	6A	Soybeans-oil					
			0.000080	0	1.000	1.000	
303	6A	Soybean-other					
			0.000080	0	1.000	1.000	
304	6A	Soybeans-mature seeds dry					
			0.000080	0	1.000	1.000	

ATTACHMENT 7: Aggregate Acute Assessment - All Commodities

305 6A	Soybeans-flour (full fat)	0.000080	0	1.000	1.000
306 6A	Soybeans-flour (low fat)	0.000080	0	1.000	1.000
307 6A	Soybeans-flour (defatted)	0.000080	0	1.000	1.000
310 O	Peppermint	0.210000	0	0.770	1.000
311 O	Peppermint-oil	0.004200	0	1.000	1.000
312 O	Spearmint	0.210000	0	0.770	1.000
313 O	Spearmint-oil	0.004200	0	1.000	1.000
384 4B	Celery juice	10.000000	6	1.000	1.000
389 O	Cranberries-juice-concentrate	0.500000	7	3.300	1.000
403 O	Peanuts-butter	0.001000	0	1.890	1.000
415 9B	Squash-spaghetti	1.000000	15	0.770	1.000
416 O	Strawberries-juice	1.000000	16	1.000	1.000
423 8	Tomatoes-dried	2.000000	17	14.300	1.000
467 19B	Celery seed	10.000000	6	1.000	1.000
482 O	Soybeans-protein isolate	0.000080	0	1.000	1.000
940 O	Peanuts-hulled	0.001000	0	1.000	1.000

ATTACHMENT 7: Aggregate Acute Assessment - All Commodities

U.S. Environmental Protection Agency  
 DEEM ACUTE analysis for METHAMIDOPHOS/ACEPHATE Ver. 6.78  
 Residue file: methaggregfin.R96 (1989-92 data)  
 Analysis Date: 09-27-1999/17:30:24 Adjustment factor #2 NOT used.  
 Residue file dated: 09-24-1999/16:45:03/8  
 Acute Reference Dose (aRfD) = 0.001000 mg/kg body-wt/day  
 MC iterations = 1000 MC list in residue file MC seed = 10  
 Run Comment: Methamidophos aggregate assessment  
 =====

Summary calculations:

	95th Percentile Exposure	% aRfD	99th Percentile Exposure	% aRfD	99.9th Percentile Exposure	% aRfD
U.S. pop - all seasons:						
0.000050	5.05		0.000198	19.79	0.000787	78.67
All infants (<1 year):						
0.000022	2.16		0.000201	20.13	0.001074	107.42
Nursing infants (<1 year):						
0.000001	0.10		0.000132	13.15	0.001431	143.11
Non-nursing infants (<1 yr):						
0.000028	2.76		0.000218	21.81	0.000947	94.70
Children (1-6 years):						
0.000094	9.44		0.000346	34.57	0.001194	119.36
Children (7-12 years):						
0.000074	7.37		0.000260	25.95	0.000976	97.62
Females (13+/preg/not nsg):						
0.000040	4.00		0.000148	14.83	0.000613	61.26
Females (13+/nursing):						
0.000043	4.29		0.000156	15.61	0.000547	54.66
Females (13-19 yrs/np/nn):						
0.000046	4.63		0.000172	17.23	0.000645	64.50
Females (20+ years/np/nn):						
0.000041	4.10		0.000166	16.58	0.000683	68.25
Females (13-50 years):						
0.000043	4.28		0.000164	16.41	0.000653	65.26
Males (13-19 years):						
0.000049	4.87		0.000173	17.29	0.000660	66.03
Males (20+ years):						
0.000045	4.54		0.000174	17.44	0.000691	69.11

ATTACHMENT 8: Aggregate Acute Assessment - No tomatoes

U.S. Environmental Protection Agency  
 DEEM Acute analysis for METHAMIDOPHOS/ACEPHATE  
 Residue file name: E:\\$notomagg.R96  
 Analysis Date 09-28-1999                          Residue file dated: 09-28-1999/15:53:49/8  
 Reference dose (aRfD) = 0.001 mg/kg bw/day  
 Comment: Methamidophos from acephate use

RDF indices and file names for Monte Carlo Analysis

1 methsbean.rdf  
 2 methsbeanpro.rdf  
 3 methbrsprout.rdf  
 4 methcaulif.rdf  
 5 methcelhan.rdf  
 6 methceleryfrz.rdf  
 7 methcranberr.rdf  
 8 methlettans.rdf  
 9 macadami.rdf  
 10 methnonbellpepperhan.rdf  
 11 methnonpepfrz.rdf  
 12 methbellpepperhan.rdf  
 13 methbellpepfrz.rdf  
 14 Potatoes.rdf  
 15 Squash.rdf  
 16 Strawberry.rdf  
 17 Tomato.rdf  
 18 Tomato2.rdf

Food	Crop		RESIDUE	RDF	Adj. Factors	Code
Grp		Food Name	(ppm)	#	#1	#2
8	0	Cranberries	0.500000	7	1.000	1.000
9	0	Cranberries-juice	0.500000	7	1.100	1.000
17	0	Strawberries	1.000000	16	0.600	1.000
46	14	Macadamia nuts (bush nuts)	0.050000	9	1.000	1.000
150	9B	Squash-summer	1.000000	15	0.770	1.000
151	9B	Squash-winter	1.000000	15	0.770	1.000
155	8	Peppers-sweet(garden)				
		11-Uncooked	4.000000	12	0.770	1.000
		12-Cooked: NFS	4.000000	12	0.595	1.000
		13-Baked	4.000000	12	0.595	1.000
		14-Boiled	4.000000	12	0.595	1.000
		31-Canned: NFS	4.000000	13	0.595	1.000
		32-Canned: Cooked	4.000000	13	0.595	1.000
		34-Canned: Boiled	4.000000	13	0.595	1.000
		42-Frozen: Cooked	4.000000	13	0.595	1.000
		51-Cured: NFS (smoked/p	4.000000	13	0.595	1.000
156	8	Peppers-chilli incl jalapeno				
		11-Uncooked	4.000000	10	0.770	1.000
		12-Cooked: NFS	4.000000	10	0.595	1.000
		13-Baked	4.000000	10	0.595	1.000
		14-Boiled	4.000000	10	0.595	1.000
		15-Fried	4.000000	10	0.595	1.000
		31-Canned: NFS	4.000000	11	0.595	1.000
		32-Canned: Cooked	4.000000	11	0.595	1.000
		33-Canned: Baked	4.000000	11	0.595	1.000
		34-Canned: Boiled	4.000000	11	0.595	1.000
		42-Frozen: Cooked	4.000000	11	0.595	1.000
		51-Cured: NFS (smoked/p	4.000000	11	0.595	1.000
		52-Cured: Cooked(smokd/	4.000000	11	0.595	1.000
		60-Canned: Cured	4.000000	11	0.595	1.000
157	8	Peppers-other				
		11-Uncooked	4.000000	10	0.770	1.000
158	8	Pimientos				

ATTACHMENT 8: Aggregate Acute Assessment - No tomatoes

	12-Cooked: NFS	4.000000	10	0.595	1.000
	14-Boiled	4.000000	10	0.595	1.000
	31-Canned: NFS	4.000000	11	0.595	1.000
	60-Canned: Cured	4.000000	11	0.595	1.000
166 4B	Celery				
	11-Uncooked	10.000000	5	0.770	1.000
	12-Cooked: NFS	10.000000	5	0.535	1.000
	13-Baked	10.000000	5	0.535	1.000
	14-Boiled	10.000000	5	0.535	1.000
	15-Fried	10.000000	5	0.535	1.000
	31-Canned: NFS	10.000000	6	0.535	1.000
	32-Canned: Cooked	10.000000	6	0.535	1.000
	34-Canned: Boiled	10.000000	6	0.535	1.000
	42-Frozen: Cooked	10.000000	6	0.535	1.000
169 5A	Brussels sprouts				
	14-Boiled	3.000000	3	0.535	1.000
	42-Frozen: Cooked	3.000000	3	0.535	1.000
171 5A	Cauliflower				
	11-Uncooked	2.000000	4	0.770	1.000
	12-Cooked: NFS	2.000000	4	0.535	1.000
	14-Boiled	2.000000	4	0.535	1.000
	15-Fried	2.000000	4	0.535	1.000
	42-Frozen: Cooked	2.000000	4	0.535	1.000
192 4A	Lettuce-head varieties				
	11-Uncooked	10.000000	8	1.000	1.000
207 1C	Potatoes/white-whole				
	11-Uncooked	0.100000	14	1.000	1.000
	12-Cooked: NFS	0.100000	14	0.195	1.000
	13-Baked	0.100000	14	0.195	1.000
	14-Boiled	0.100000	14	0.195	1.000
	15-Fried	0.100000	14	10.000	1.000
	31-Canned: NFS	0.100000	14	0.195	1.000
208 1C	Potatoes/white-unspecified				
209 1C	Potatoes/white-peeled				
210 1C	Potatoes/white-dry				
211 1C	Potatoes/white-peel only				
227 6C	Beans-dry-great northern				
	32-Canned: Cooked	0.000250	0	0.697	1.000
228 6C	Beans-dry-kidney				
	12-Cooked: NFS	0.000250	0	0.638	1.000
	13-Baked	0.000250	0	0.638	1.000
	14-Boiled	0.000250	0	0.638	1.000
	32-Canned: Cooked	0.000250	0	0.697	1.000
	34-Canned: Boiled	0.000250	0	0.697	1.000
	42-Frozen: Cooked	0.000250	0	0.638	1.000
229 6C	Beans-dry-lima				
	14-Boiled	0.000250	0	0.638	1.000
	32-Canned: Cooked	0.000250	0	0.697	1.000
230 6C	Beans-dry-navy (pea)				
	32-Canned: Cooked	0.000250	0	0.697	1.000
	34-Canned: Boiled	0.000250	0	0.697	1.000
231 6C	Beans-dry-other				
232 6C	Beans-dry-pinto				
	12-Cooked: NFS	0.000250	0	0.638	1.000
	13-Baked	0.000250	0	0.638	1.000
	14-Boiled	0.000250	0	0.638	1.000
	15-Fried	0.000250	0	0.638	1.000
	32-Canned: Cooked	0.000250	0	0.697	1.000
	42-Frozen: Cooked	0.000250	0	0.638	1.000
233 6B	Beans-succulent-lima				
	11-Uncooked	3.000000	1	1.000	1.000
	12-Cooked: NFS	3.000000	1	0.638	1.000
	14-Boiled	3.000000	1	0.638	1.000
	32-Canned: Cooked	3.000000	2	0.697	1.000
	42-Frozen: Cooked	3.000000	2	0.638	1.000

ATTACHMENT 8: Aggregate Acute Assessment - No tomatoes

234 6A	44-Frozen: Boiled Beans-succulent-green	3.000000	2	0.638	1.000
	11-Uncooked	3.000000	1	1.000	1.000
	12-Cooked: NFS	3.000000	1	0.638	1.000
	14-Boiled	3.000000	1	0.638	1.000
	31-Canned: NFS	3.000000	2	0.697	1.000
	32-Canned: Cooked	3.000000	2	0.697	1.000
	34-Canned: Boiled	3.000000	2	0.697	1.000
	42-Frozen: Cooked	3.000000	2	0.638	1.000
	44-Frozen: Boiled	3.000000	2	0.638	1.000
	51-Cured: NFS (smoked/p	3.000000	2	0.638	1.000
235 6A	Beans-succulent-other	3.000000	2	0.697	1.000
236 6A	Beans-succulent-yellow/wax	3.000000	2	0.697	1.000
	14-Boiled	3.000000	1	0.638	1.000
	32-Canned: Cooked	3.000000	2	0.697	1.000
	42-Frozen: Cooked	3.000000	2	0.697	1.000
249 6C	Beans-dry-broadbeans	0.000250	0	0.638	1.000
	14-Boiled	0.000250	0	0.638	1.000
250 6B	Beans-succulent-broadbeans	3.000000	1	1.000	1.000
251 6C	Beans-dry-pigeon beans	0.000250	0	0.770	1.000
253 6	Beans-unspecified	3.000000	1	1.000	1.000
255 6A	Soybeans-sprouted seeds	0.000080	0	1.000	1.000
256 6C	Beans-dry-hyacinth	0.000250	0	0.770	1.000
257 6	Beans-succulent-hyacinth	3.000000	1	1.000	1.000
258 6C	Beans-dry-blackeye peas/cowpea	0.000250	0	0.638	1.000
	14-Boiled	0.000250	0	0.638	1.000
259 6C	Beans-dry-garbanzo/chick pea	0.000250	0	0.638	1.000
	12-Cooked: NFS	0.000250	0	0.638	1.000
	14-Boiled	0.000250	0	0.638	1.000
	15-Fried	0.000250	0	0.638	1.000
	32-Canned: Cooked	0.000250	0	0.697	1.000
290 O	Cottonseed-oil	0.003900	0	1.000	1.000
291 O	Cottonseed-meal	0.003900	0	1.000	1.000
293 O	Peanuts-oil	0.001000	0	1.000	1.000
297 6A	Soybeans-oil	0.000080	0	1.000	1.000
303 6A	Soybean-other	0.000080	0	1.000	1.000
304 6A	Soybeans-mature seeds dry	0.000080	0	1.000	1.000
305 6A	Soybeans-flour (full fat)	0.000080	0	1.000	1.000
306 6A	Soybeans-flour (low fat)	0.000080	0	1.000	1.000
307 6A	Soybeans-flour (defatted)	0.000080	0	1.000	1.000
310 O	Peppermint	0.210000	0	0.770	1.000
311 O	Peppermint-oil	0.004200	0	1.000	1.000
312 O	Spearmint	0.210000	0	0.770	1.000
313 O	Spearmint-oil	0.004200	0	1.000	1.000
384 4B	Celery juice	10.000000	6	1.000	1.000
389 O	Cranberries-juice-concentrate	0.500000	7	3.300	1.000
403 O	Peanuts-butter	0.001000	0	1.890	1.000
415 9B	Squash-spaghetti	1.000000	15	0.770	1.000
416 O	Strawberries-juice	1.000000	16	1.000	1.000
467 19B	Celery seed	10.000000	6	1.000	1.000
482 O	Soybeans-protein isolate	0.000080	0	1.000	1.000
940 O	Peanuts-hulled	0.001000	0	1.000	1.000

ATTACHMENT 8: Aggregate Acute Assessment- No tomatoes

U.S. Environmental Protection Agency  
 DEEM ACUTE analysis for METHAMIDOPHOS/ACEPHATE Ver. 6.78  
 Residue file: \$notomagg.R96 (1989-92 data)  
 Analysis Date: 09-28-1999/16:53:48 Adjustment factor #2 NOT used.  
 Residue file dated: 09-28-1999/15:53:49/8  
 Acute Reference Dose (aRfD) = 0.001000 mg/kg body-wt/day  
 MC iterations = 1000 MC list in residue file MC seed = 10  
 Run Comment: Methamidophos from acephate use  
 =====

Summary calculations:

	95th Percentile Exposure	% aRfD	99th Percentile Exposure	% aRfD	99.9th Percentile Exposure	% aRfD
U.S. pop - all seasons:						
	0.000011	1.10	0.000067	6.65	0.000308	30.77
All infants (<1 year):						
	0.000010	0.98	0.000098	9.84	0.000774	77.40
Nursing infants (<1 year):						
	0.000000	0.04	0.000003	0.25	0.000009	0.94
Non-nursing infants (<1 yr):						
	0.000015	1.52	0.000149	14.91	0.000898	89.79
Children (1-6 years):						
	0.000020	1.96	0.000136	13.58	0.000604	60.39
Children (7-12 years):						
	0.000014	1.43	0.000087	8.67	0.000369	36.87
Females (13+/preg/not nsg):						
	0.000008	0.82	0.000045	4.49	0.000190	19.02
Females (13+/nursing):						
	0.000011	1.14	0.000064	6.40	0.000259	25.91
Females (13-19 yrs/np/nn):						
	0.000009	0.86	0.000052	5.21	0.000228	22.80
Females (20+ years/np/nn):						
	0.000010	1.05	0.000059	5.89	0.000260	25.97
Females (13-50 years):						
	0.000010	0.98	0.000054	5.41	0.000240	23.97
Males (13-19 years):						
	0.000008	0.82	0.000049	4.91	0.000211	21.07
Males (20+ years):						
	0.000010	0.98	0.000056	5.59	0.000248	24.78

**RDF #10****All Non-Bell peppers except canned, frozen and cured****FDA data from 1993-1998 (1612 samples, 526 detects)****Samples decomposed, n = 84 where n = number of samples in composite****23 data points truncated at tolerance. 977 residue values used.****Decomposed data points range from 0.00005 - 0.96****33% detected ( actual residues found were 0.001 - 1.0 ppm)****48% CT**

Nonbell peppers-fresh-decomp

TotalZ = 1576

454, 0.00015	0.006773	0.217043	0.356622	0.055896	0.036190	0.017707
0.012976	0.039875	0.053617	0.007603	0.094447	0.128539	0.050968
0.064375	0.016528	0.054504	0.025844	0.624168	0.003283	0.023105
0.041380	0.007013	0.030870	6.294849	0.830930	0.004221	0.339501
1.458004	0.590777	0.301703	0.024661	0.163422	0.027682	0.404719
0.019988	0.016075	0.018459	0.032592	0.096802	0.251464	0.051813
0.119285	0.449337	0.514633	2.518575	0.006115	0.660042	0.270140
0.060161	0.004809	0.003927	0.038602	0.126107	0.065766	0.025001
0.287909	0.008798	0.007763	0.156465	0.544023	0.318854	3.177477
0.022558	0.057185	0.045046	0.074528	0.025648	1.048770	0.023550
0.070724	0.003449	1.174279	0.112816	0.237477	1.658210	0.009968
0.263697	0.743587	0.225747	0.147927	0.145492	0.107050	1.744108
0.039236	0.207428	0.171118	0.379447	0.000444	0.004339	0.340904
0.078444	0.187031	0.000600	0.036552	0.112066	0.162078	0.071970
0.004169	0.033294	0.102090	0.024410	0.004610	0.021789	0.008376
0.007162	0.122202	0.037673	0.248204	0.009049	0.669041	1.407267
0.414313	0.012549	0.179066	0.033822	0.229085	0.017350	0.057750
0.374917	0.273801	0.010305	0.009371	0.064474	0.034655	0.011627
0.075295	0.885128	0.211661	0.049462	0.443417	0.011418	0.046230
0.050696	0.024024	0.063477	0.181577	0.049357	1.308915	0.027942
0.027237	0.029061	0.073758	0.067180	0.029311	0.097937	0.058761
1.198503	0.193151	0.034214	0.083749	0.009782	0.141151	0.005067
0.062136	0.040794	3.554221	0.003323	0.030700	0.002340	0.013127
0.185695	0.501664	0.499385	0.330855	0.124554	0.314181	0.145277
0.027381	0.308344	0.052534	0.045867	0.131081	0.002660	0.020881
0.136317	0.005521	1.073076	0.168317	0.019001	0.059559	0.028220
0.012463	0.036878	0.001394	0.001995	9.386438	0.278234	0.281843
0.103724	0.004686	0.016935	0.002800	0.209107	1.776326	0.153188
17.707215	0.002261	0.087367	0.017969	0.041508	0.091893	0.012718
0.005768	0.256261	0.062392	0.199303	0.012095	0.143540	0.078948
0.165436	0.067939	0.061025	0.026652	0.003825	0.003993	0.204293
0.047881	0.000687	0.048325	0.015741	0.155327	0.010555	0.766232
0.058205	0.025958	0.081134	0.008256	0.133393	0.018841	0.008068
0.129873	1.003218	0.100839	0.158182	0.586134	0.014300	0.044560
0.010438	0.019491	0.978968	0.010984	0.221861	0.013512	0.000844
0.477325	0.178750	2.913667	0.022249	0.004914	0.030060	0.135135
0.237005	0.044147	0.856811	0.104533	0.387863	0.006170	0.084206
0.061331	0.009214	0.612437	0.364930	0.091181	3.849302	0.021926
0.016370	0.013371	1.882339	0.023688	0.102729	0.014874	0.099863
0.077570	0.254676	0.025243	0.008662	2.339974	0.720227	0.005439
0.066272	0.035850	0.291732	0.151196	0.020703	0.393753	0.486426
0.232786	0.006309	0.006862	0.023364	0.566763	0.009624	0.166237
0.052852	0.006466	0.040652	0.003652	0.109595	0.121465	0.046379
0.028519	0.011298	0.003571	0.065478	0.171861	0.000221	0.007902

## ATTACHMENT 8: Aggregate Acute Assessment- Residue Distribution Files

0.019749	0.056718	0.277476	0.039941	0.001137	0.009819	0.283339
0.021467	0.043295	0.399979	0.015543	0.027001	0.042848	0.074252
0.095249	1.139566	0.082059	0.736534	0.000681	0.040923	0.089916
1.509566	1.034022	0.266041	0.644084	1.588449	0.013157	0.329935
0.058874	0.080618	0.006622	0.048984	0.002884	0.007122	0.001329
1.323878	0.292797	0.045420	0.002930	0.115726	0.795186	0.002730
0.873118	0.001308	0.096571	0.159567	0.020217	0.050887	0.069746
0.018764	0.017106	0.350421	0.114972	0.136320	8.248280	1.900414
0.218847	1.564889	0.072869	0.014747	0.421399	0.196456	0.022648
0.019386	0.076822	0.041915	0.071439	0.039276	0.019033	2.286560
0.001267	0.106033	2.288118	0.630959	0.007293	0.545097	0.051864
0.017795	0.258246	0.001568	0.020266	0.006571	0.296675	1.435182
0.005165	0.175497	0.035503	0.079589	0.016140	0.086259	0.043567
0.132301	0.244836	0.029715	0.085679	0.068404	0.033644	0.006246
0.193071	0.049965	0.051738	0.011825	0.042338	0.051386	1.355017
0.026991	0.436164	0.015224	0.010115	7.574486	0.095661	0.061008
0.002570	0.001757	0.152315	0.004543	0.003133	0.009386	0.111070
0.012216	0.202577	0.032870	0.007931	0.059816	0.067170	0.032472
0.026476	2.659293	0.013814	0.029736	0.337870	0.039163	0.002059
0.020349	0.525918	0.034551	2.083259	0.004735	0.147514	0.010679
2.150847	0.114412	0.032271	0.024492	0.124860	0.276832	0.017892
0.055223	0.085053	0.033542	0.004969	0.011634	0.003624	0.057414
0.011767	0.086666	0.015058	0.002467	0.072090	0.364135	0.055107
0.014039	0.039023	0.070594	0.002119	0.006458	1.805511	0.470843
0.107599	0.215671	0.184649	0.065968	0.077168	0.033258	0.163771
0.013328	0.090311	0.457821	0.441210	0.176408	0.238814	0.001857
0.002087	0.043741	0.042920	0.015193	0.003726	0.005757	0.311391
0.038399	0.075995	0.016142	0.263178	0.845195	0.241221	0.405430
0.022739	0.140283	0.807463	0.022923	0.834707	0.004385	0.003030
0.007296	0.047336	0.228497	0.041072	0.563078	0.014640	0.015817
0.001932	0.016785	0.108416	0.002201	0.019335	1.054585	0.014584
5.819085	0.422034	0.298744	0.437402	0.289828	0.204625	0.098557
0.312576	0.003071	0.005930	0.022241	0.997222	0.003188	0.245594
0.174565	0.028844	0.430669	0.141342	1.395737	0.125457	0.005169
0.015514	0.111213	0.008959	1.965848	0.601902	0.008339	3.790115
0.037261	0.014578	0.089421	0.028325	0.580377	0.010854	0.029406
0.470165	0.030298	0.195235	0.173219	0.053627	0.026495	0.394634
0.021079	0.347905	0.076170	0.085397	0.028035	0.376571	0.013774
0.054806	0.031702	0.046784	0.035677	0.049839	0.132253	0.011206
0.116159	0.009569	0.068455	0.025837	0.153939	0.119547	0.233752
0.002398	0.694989	0.199605	0.015113	0.334467	0.088146	0.082324
0.031845	0.137156	0.139470	0.016778	0.497649	0.023774	0.021988
0.576969	0.093009	0.534727	0.034952	0.075619	0.015598	0.324548
0.063283	0.004481	0.190549	0.156599	0.024941	0.401005	0.087292
0.007464	0.001644	0.241887	0.255154	0.107356	0.522119	0.016554
0.035116	0.069025	0.021344	0.013640	0.001671	0.021170	0.012530
0.383919	0.913637	0.005331	0.161608	0.049138	0.680701	0.005580
0.148663	0.098741	0.008528	0.226440	0.077998	0.425672	1.123445
0.005645	0.018319	0.031137	0.045349	0.059015	0.001547	0.029940
0.127537	1.991708	0.001033	0.273151	0.023579	0.012669	0.064300
0.119173	0.953775	1.248317	0.097401	0.187473	0.888920	0.388523
0.460361	0.123542	0.083075	0.008225	0.120659	0.000386	0.045787
0.001099	4.766204	0.117888	0.197767	0.024316	0.121733	0.044849
0.093213	0.088876	0.014063	1.256850	0.012227	0.021293	0.070465
0.002983	0.359931	0.042582	0.009603	0.130703	0.384552	0.031136
0.007355	0.325431	0.011045	4.114967	0.071318	0.016420	0.106332
0.024220	0.550468	0.069406	0.467237	0.475146	0.017081	0.122872
0.327742	0.680053	0.038053	0.009098	0.210912	0.047896	0.005861
0.053971	0.794727	0.010814	0.968121	0.302480	0.072805	0.003414

## ATTACHMENT 8: Aggregate Acute Assessment- Residue Distribution Files

0.024841	0.005302	0.217423	0.931603	0.014006	0.128395	0.925781
0.590446	0.014094	0.457213	0.034050	0.063535	0.066361	0.052423
0.010094	0.013487	0.041756	0.714481	0.032109	0.005411	0.055896
0.027466	0.001425	0.181635	0.012349	0.165212	0.618565	0.200960
0.012826	1.749617	0.007462	0.083814	0.133153	0.013246	0.093131
0.223786	5.490212	0.367670	0.073443	0.091626	0.127074	0.002691
0.010016	1.033129	2.908252	0.009180	0.110083	0.103332	0.236998
0.012034	0.135086	0.192035	0.044093	0.185067	0.098012	0.001769
0.102805	0.034533	0.139858	0.035547	0.206950	0.083245	0.879298
0.194986	0.048672	0.057256	0.342978	0.050399	0.048127	0.169259
0.015489	0.018898	0.218679	0.159720	0.010400	3.189127	0.019702
0.011838	0.003962	0.535996	0.734085	0.037355	0.317549	0.011019
0.002566	0.055697	0.005911	0.089174	0.189131	0.130094	0.142713
0.036170	0.313245	0.504639	0.049932	0.006786	0.064851	0.034886
4.615492	0.105929	0.025457	0.105187	0.033596	0.154667	0.021451
0.114134	0.017986	0.258701	0.027217	0.118602	0.009542	0.010570
0.770990	0.557010	0.373145	0.039959	0.108624	0.020949	0.211462
1.175259	0.116822	1.647224	0.028605	0.038080	0.008552	0.084482
0.214522	0.023363	0.006039	0.037873	0.028718	0.248882	0.008583
0.411033	0.268148	0.006939	0.101527	0.674785	0.062401	0.019428
0.027858	0.068073	0.003819	0.026153	0.080717	0.180004	0.000838
0.018596	0.003309	0.007332	0.000545	0.005094	0.011719	0.001175
0.000254	0.345230	0.047189	0.053929	0.174272	0.036779	0.007684
0.031887	0.017588	0.038806	17.258461	0.053152	0.058529	1.209223
0.158283	0.068804	0.753741	0.010254	1.496986	0.025335	0.100637
0.031703	0.628804	0.816117	0.008735	0.178421	0.008029	1.099984
0.030765	0.113214	0.569178	0.076397	0.017253	0.145110	0.448183
0.014397	0.007846	0.020072	0.004855	0.030243	0.036386	1.290785
0.096215	0.008927	0.061666	0.081201	0.074875	0.039632	0.056517
0.182911	0.138756	0.202541	0.293292	0.145300	0.032748	0.166767
2.435452	0.170942	0.078320	0.004270	0.014948	0.061401	0.486942
0.037538	0.022618	0.006900	0.004155	0.357563	0.307878	0.070980
0.047338	0.349434	0.287567	0.706522	0.026479	0.090582	0.045972
0.018373	0.057831	0.230730	0.000992	0.252741	0.011374	0.002367
0.054361	0.021866	0.020456	0.111634	0.151054	0.020594	
2.801541	0.099611	0.029284	0.079887	0.266690	0.004564	
0.015962	0.006276	0.116943	0.065172	0.223043	0.651905	
0.062840	0.041937	0.079461	0.040545	0.514972	0.092794	
0.017466	0.018143	0.030918	0.060243	0.247987	0.044579	
0.086573	2.541966	0.137344	0.004044	0.657836	0.024002	
0.149528	0.043212	0.151855	0.094319	0.046705	0.281628	

**RDF # 11*****Non-Bell peppers: canned, frozen and cured******FDA data from 1993-1998 (1612 samples, 526 detects)******Data Used Directly******33% detected ( actual residues found were 0.001 - 1.0 ppm)******48% CT***

Non-Bell Peppers

frozen, canned, cured

48%CT

TOTALZ=843

243, 0.00015	0.02500	0.10000	0.01300	0.18000	0.0005	0.03000
0.02000	0.04000	0.20000	0.00800	0.0005	0.10000	0.07000
0.20000	0.18000	0.06000	0.01600	0.04000	0.03000	0.07000
0.0005	0.14000	0.09000	0.02100	0.19000	0.07000	0.11000
0.19000	0.75000	0.30000	0.01300	0.15000	0.0005	0.28000
0.00900	0.19000	0.03000	0.27000	0.10000	0.02000	0.0005
0.25000	0.15000	0.16000	0.34000	0.53000	0.0005	0.01000
0.02000	0.03000	0.05000	0.26000	0.14000	0.12000	0.12000
0.06000	0.96000	0.03000	0.43000	0.00500	0.18000	0.13000
0.00300	0.0005	0.75000	0.42000	0.0005	0.02000	0.12000
0.00400	0.12000	0.16000	0.00200	0.01000	0.01000	0.04000
0.06000	0.22000	0.14000	0.01000	0.01000	0.25000	0.0005
0.00600	0.06000	0.04000	0.20000	0.05000	0.08000	0.0005
0.01000	0.19000	0.06700	0.40000	0.17000	0.03000	0.06000
0.00400	0.09000	0.25000	0.92000	0.01000	0.02000	0.23000
0.31000	0.13000	0.14000	0.07000	0.0005	0.08000	0.08000
0.12000	0.01000	0.02000	0.80000	0.01000	1.00000	0.0005
0.34000	0.15000	0.30000	0.20000	0.01000	0.20000	0.03000
0.01000	0.02000	0.19000	0.10000	0.01000	0.20000	0.01000
0.00800	0.02000	0.50000	0.05000	0.0005	0.10000	0.01000
0.01900	0.40000	0.24000	0.45000	0.03000	0.03000	0.42000
0.06000	0.30000	0.00600	0.25000	0.11000	0.02000	0.0005
0.10000	0.20000	0.21000	0.25000	0.05000	0.05000	0.11000
0.0005	0.20000	0.00300	0.01000	0.0005	0.03000	0.03000
0.0005	0.08000	0.06700	0.40000	0.0005	0.15000	0.0005
0.29000	0.30000	0.000500	0.50000	0.02200	0.10000	0.71000
0.01000	0.38000	0.05000	0.15000	0.0005	0.02000	0.11000
0.01000	0.30000	0.22000	0.03000	0.01000	0.10000	0.02000
0.05700	0.50000	0.00500	0.20000	0.01000	0.12000	0.02000
0.03000	0.90000	0.36000	0.12000	0.12000	0.20000	0.18000
0.11000	0.10000	0.19000	0.40000	0.11000	0.18000	0.11000
0.11000	0.06000	0.62000	0.48000	0.58900	0.02000	0.16000
0.53000	0.10000	0.32000	0.22000	0.05000	0.02000	0.02000
0.01000	0.10000	0.04000	0.02000	0.0005	0.08000	0.02000
0.02000	0.10000	0.03800	0.10000	0.10000	0.07000	0.04000
0.01000	0.12000	0.67000	0.32000	0.0005	0.25000	0.08000
0.78000	0.03000	0.09000	0.02000	0.06000	0.03000	0.04000
0.01000	0.18000	0.20000	0.14000	0.13000	0.01000	0.25000
0.94000	0.08000	0.51000	0.03000	0.02000	0.12000	0.08000
0.05000	0.23000	0.56000	0.07000	0.0005	0.02000	0.15000
0.02000	0.08900	0.02000	0.01000	0.07000	0.07000	0.03000
0.10000	0.53000	0.02000	0.04000	0.13000	0.05000	0.04000
0.0005	0.18000	0.08000	0.10000	0.03000	0.15000	0.02000
0.06000	0.20000	0.18000	0.27300	0.15000	0.10000	0.02000
0.04000	0.42000	0.03600	0.38000	0.18000	0.07000	0.0005

## ATTACHMENT 8: Aggregate Acute Assessment- Residue Distribution Files

0.01000	0.04000	0.19900	0.17000	0.60000	0.03500	0.14000
0.10000	0.05000	0.09000	0.04000	0.0005	0.02000	0.45000
0.02000	0.70000	0.0005	0.08000	0.60000	0.02000	0.12000
0.30000	0.04000	0.13000	0.15000	0.05100	0.03000	0.07000
0.20000	0.08000	0.02000	0.45000	0.06700	0.35000	0.07000
0.07000	0.30000	0.03000	0.05000	0.07300	0.50000	0.05000
0.03000	0.12000	0.0005	0.19000	0.12900	0.03000	0.13000
0.03000	0.25000	0.01000	0.20000	0.10200	0.09000	0.11000
0.02000	0.10000	0.03000	0.30000	0.02000	0.02000	0.20000
0.05000	0.13000	0.0005	0.02000	0.05000	0.01000	0.14000
0.50000	0.11000	0.18000	0.03000	0.05900	0.17000	0.02000
0.30000	0.12000	0.26000	0.02000	0.05000	0.20000	0.02000
0.30000	0.05000	0.0005	0.30000	0.20400	0.04000	0.20000
0.15000	0.25000	0.02000	0.06000	0.06200	0.03000	0.02000
0.10000	0.05000	0.0005	0.02000	0.05000	0.03000	0.90000
0.10000	0.50000	0.0005	0.20000	0.06000	0.05000	0.12000
0.33000	0.20000	0.34000	0.15000	0.08600	0.50000	0.40000
0.02000	0.04000	0.11600	0.50000	0.40200	0.10000	0.0005
0.08000	0.13000	0.0005	0.50000	0.08400	0.22000	0.07400
0.15000	0.04000	0.08000	0.85000	0.13400	0.10000	0.12400
0.15000	0.05000	0.03000	0.05000	0.01200	0.17000	0.04700
0.05000	0.30000	0.05000	0.12000	0.05100	0.10000	0.12000
0.03000	0.20000	0.03000	0.20000	0.10300	0.25000	0.01700
0.0005	0.08000	0.14000	0.07000	0.01200	0.05000	0.15400
0.12000	0.0005	0.01000	0.02000	0.21000	0.01000	0.10900
0.04000	0.06800	0.11000	0.01000	0.03100	0.02000	0.11500
0.08000	0.08000	0.0005	0.12000	0.40800	0.10000	0.46300
0.06000	0.36000	0.12000	0.06000	0.36100	0.01000	
0.05000	0.0005	0.11000	0.02000	0.11900	0.15000	
0.06000	0.06500	0.09000	0.01000			

**RDF #12****All Bell peppers except canned, frozen and cured****FDA data from 1993-1998 (1613 samples, 338 detects)****Samples decomposed, n = 84 where n = number of samples in composite****24 data points truncated at tolerance. 976 residue values used.****Decomposed data points range from 0.000022 - 0.95****21% detected ( actual residues found were 0.007 - 0.87 ppm)****48% CT**

## RDF #12

Bell peppers-decomp-fresh

TotalZ=2476

1 2 8 6 ,	0.00031	0.00068	0.00114	0.00173	0.00246	0.00336	0.00444
0.0003	0.00031	0.00068	0.00116	0.00175	0.00248	0.00338	0.00446
0.00001	0.00032	0.00070	0.00116	0.00177	0.00249	0.00338	0.00448
0.00002	0.00033	0.00070	0.00119	0.00177	0.00251	0.00340	0.00452
0.00003	0.00034	0.00072	0.00120	0.00181	0.00252	0.00344	0.00456
0.00003	0.00035	0.00072	0.00121	0.00182	0.00257	0.00345	0.00458
0.00004	0.00035	0.00073	0.00122	0.00183	0.00258	0.00350	0.00460
0.00005	0.00036	0.00074	0.00125	0.00184	0.00258	0.00352	0.00465
0.00006	0.00037	0.00075	0.00125	0.00185	0.00259	0.00355	0.00467
0.00006	0.00038	0.00077	0.00126	0.00185	0.00262	0.00356	0.00470
0.00007	0.00039	0.00077	0.00127	0.00189	0.00264	0.00358	0.00474
0.00008	0.00039	0.00079	0.00128	0.00190	0.00267	0.00360	0.00478
0.00009	0.00040	0.00080	0.00129	0.00193	0.00269	0.00363	0.00479
0.00010	0.00041	0.00080	0.00132	0.00193	0.00270	0.00366	0.00481
0.00010	0.00041	0.00082	0.00132	0.00195	0.00270	0.00369	0.00485
0.00011	0.00043	0.00083	0.00134	0.00197	0.00275	0.00371	0.00493
0.00011	0.00044	0.00084	0.00135	0.00199	0.00276	0.00374	0.00493
0.00012	0.00044	0.00085	0.00136	0.00199	0.00278	0.00376	0.00493
0.00013	0.00046	0.00086	0.00137	0.00201	0.00279	0.00378	0.00497
0.00013	0.00047	0.00086	0.00140	0.00202	0.00283	0.00379	0.00504
0.00014	0.00047	0.00089	0.00140	0.00204	0.00283	0.00382	0.00505
0.00014	0.00049	0.00089	0.00143	0.00207	0.00286	0.00382	0.00510
0.00016	0.00049	0.00091	0.00143	0.00210	0.00289	0.00389	0.00510
0.00016	0.00050	0.00092	0.00144	0.00211	0.00290	0.00391	0.00513
0.00017	0.00050	0.00094	0.00144	0.00213	0.00293	0.00392	0.00515
0.00017	0.00052	0.00094	0.00147	0.00214	0.00295	0.00393	0.00520
0.00018	0.00052	0.00096	0.00148	0.00215	0.00297	0.00399	0.00524
0.00018	0.00053	0.00096	0.00151	0.00217	0.00300	0.00399	0.00526
0.00020	0.00054	0.00097	0.00151	0.00218	0.00302	0.00406	0.00528
0.00021	0.00055	0.00098	0.00153	0.00220	0.00304	0.00407	0.00532
0.00021	0.00056	0.00100	0.00153	0.00223	0.00306	0.00408	0.00535
0.00022	0.00057	0.00101	0.00156	0.00224	0.00308	0.00410	0.00539
0.00023	0.00058	0.00103	0.00157	0.00227	0.00308	0.00414	0.00541
0.00023	0.00058	0.00103	0.00158	0.00228	0.00311	0.00418	0.00544
0.00024	0.00059	0.00104	0.00159	0.00229	0.00315	0.00423	0.00547
0.00025	0.00060	0.00104	0.00161	0.00229	0.00316	0.00423	0.00552
0.00026	0.00061	0.00106	0.00162	0.00233	0.00318	0.00427	0.00557
0.00026	0.00062	0.00106	0.00164	0.00235	0.00321	0.00428	0.00558
0.00027	0.00063	0.00108	0.00166	0.00239	0.00324	0.00431	0.00560
0.00028	0.00064	0.00110	0.00167	0.00239	0.00326	0.00432	0.00567
0.00029	0.00065	0.00111	0.00169	0.00240	0.00327	0.00437	0.00567
0.00029	0.00066	0.00113	0.00170	0.00242	0.00329	0.00438	0.00572
0.00030	0.00067	0.00114	0.00170	0.00245	0.00330	0.00442	0.00575

## ATTACHMENT 8: Aggregate Acute Assessment- Residue Distribution Files

0.00579	0.00812	0.01141	0.01577	0.02194	0.03073	0.04430	0.06551
0.00580	0.00827	0.01148	0.01588	0.02211	0.03107	0.04446	0.06578
0.00590	0.00829	0.01161	0.01597	0.02225	0.03133	0.04491	0.06648
0.00591	0.00833	0.01161	0.01617	0.02232	0.03141	0.04503	0.06673
0.00594	0.00836	0.01169	0.01621	0.02259	0.03156	0.04551	0.06746
0.00595	0.00840	0.01170	0.01624	0.02265	0.03177	0.04558	0.06768
0.00600	0.00847	0.01180	0.01632	0.02269	0.03198	0.04585	0.06827
0.00600	0.00851	0.01184	0.01641	0.02271	0.03229	0.04603	0.06900
0.00613	0.00857	0.01192	0.01644	0.02304	0.03239	0.04655	0.06935
0.00613	0.00861	0.01200	0.01659	0.02308	0.03258	0.04686	0.07052
0.00617	0.00861	0.01203	0.01663	0.02332	0.03278	0.04743	0.07053
0.00618	0.00871	0.01216	0.01683	0.02344	0.03309	0.04749	0.07070
0.00623	0.00877	0.01221	0.01685	0.02361	0.03324	0.04774	0.07118
0.00627	0.00884	0.01221	0.01701	0.02371	0.03351	0.04820	0.07205
0.00631	0.00886	0.01237	0.01709	0.02378	0.03355	0.04855	0.07229
0.00634	0.00893	0.01243	0.01723	0.02396	0.03398	0.04865	0.07337
0.00638	0.00895	0.01255	0.01731	0.02412	0.03405	0.04897	0.07364
0.00641	0.00902	0.01257	0.01741	0.02414	0.03424	0.04928	0.07451
0.00650	0.00906	0.01261	0.01753	0.02430	0.03436	0.04996	0.07459
0.00651	0.00915	0.01270	0.01762	0.02436	0.03473	0.05007	0.07484
0.00657	0.00917	0.01272	0.01773	0.02462	0.03475	0.05018	0.07578
0.00658	0.00927	0.01282	0.01778	0.02470	0.03502	0.05050	0.07625
0.00659	0.00928	0.01291	0.01784	0.02493	0.03510	0.05104	0.07696
0.00663	0.00934	0.01297	0.01796	0.02499	0.03564	0.05106	0.07714
0.00669	0.00939	0.01300	0.01806	0.02520	0.03566	0.05149	0.07754
0.00673	0.00947	0.01304	0.01817	0.02537	0.03603	0.05209	0.07827
0.00680	0.00949	0.01319	0.01830	0.02556	0.03604	0.05223	0.07844
0.00681	0.00958	0.01326	0.01839	0.02558	0.03630	0.05245	0.08009
0.00683	0.00960	0.01335	0.01842	0.02574	0.03636	0.05290	0.08028
0.00689	0.00963	0.01337	0.01857	0.02586	0.03682	0.05306	0.08115
0.00690	0.00969	0.01358	0.01871	0.02611	0.03705	0.05363	0.08139
0.00694	0.00973	0.01358	0.01875	0.02630	0.03717	0.05411	0.08193
0.00704	0.00982	0.01366	0.01883	0.02653	0.03731	0.05463	0.08267
0.00705	0.00984	0.01368	0.01904	0.02656	0.03759	0.05499	0.08379
0.00708	0.00994	0.01375	0.01907	0.02665	0.03765	0.05501	0.08403
0.00712	0.00998	0.01388	0.01919	0.02687	0.03810	0.05565	0.08516
0.00720	0.00998	0.01395	0.01921	0.02696	0.03837	0.05573	0.08540
0.00720	0.01012	0.01395	0.01946	0.02704	0.03888	0.05616	0.08569
0.00725	0.01012	0.01407	0.01953	0.02729	0.03893	0.05661	0.08696
0.00729	0.01018	0.01419	0.01975	0.02735	0.03894	0.05715	0.08704
0.00734	0.01023	0.01425	0.01980	0.02765	0.03900	0.05725	0.08760
0.00737	0.01032	0.01426	0.01995	0.02780	0.03966	0.05772	0.08919
0.00746	0.01040	0.01447	0.01996	0.02810	0.03979	0.05828	0.08932
0.00748	0.01044	0.01449	0.02008	0.02814	0.04003	0.05829	0.09004
0.00753	0.01050	0.01452	0.02016	0.02827	0.04032	0.05889	0.09076
0.00756	0.01052	0.01462	0.02032	0.02841	0.04082	0.05901	0.09116
0.00761	0.01062	0.01471	0.02042	0.02864	0.04086	0.05982	0.09135
0.00765	0.01065	0.01479	0.02051	0.02876	0.04108	0.05999	0.09263
0.00766	0.01065	0.01487	0.02067	0.02904	0.04123	0.06058	0.09342
0.00774	0.01077	0.01493	0.02077	0.02913	0.04152	0.06121	0.09454
0.00779	0.01084	0.01501	0.02079	0.02930	0.04177	0.06141	0.09484
0.00784	0.01089	0.01504	0.02097	0.02954	0.04201	0.06148	0.09689
0.00789	0.01091	0.01526	0.02100	0.02967	0.04222	0.06249	0.09707
0.00793	0.01102	0.01526	0.02122	0.02988	0.04260	0.06289	0.09824
0.00794	0.01111	0.01547	0.02144	0.02991	0.04264	0.06338	0.09869
0.00795	0.01113	0.01551	0.02153	0.03021	0.04317	0.06352	0.09895
0.00804	0.01115	0.01560	0.02160	0.03043	0.04320	0.06396	0.09931
0.00810	0.01129	0.01561	0.02174	0.03061	0.04363	0.06402	0.10060
0.00812	0.01132	0.01571	0.02186	0.03064	0.04368	0.06509	0.10110

ATTACHMENT 8: Aggregate Acute Assessment- Residue Distribution Files

0.10330	0.12488	0.15661	0.19903	0.26038	0.36880	0.56937	1.10546
0.10364	0.12667	0.15686	0.20166	0.26563	0.37162	0.58567	1.10637
0.10454	0.12693	0.15792	0.20327	0.26927	0.38239	0.60711	1.13689
0.10539	0.12825	0.16078	0.20432	0.27190	0.38938	0.61320	1.19345
0.10574	0.12852	0.16201	0.20772	0.27827	0.39468	0.62800	1.24309
0.10715	0.13062	0.16229	0.20921	0.27939	0.40364	0.64014	1.25712
0.10847	0.13098	0.16409	0.21173	0.28265	0.40659	0.66098	1.32791
0.10911	0.13313	0.16501	0.21362	0.28734	0.42135	0.66773	1.41463
0.10965	0.13355	0.16884	0.21377	0.29313	0.42179	0.69756	1.48032
0.11047	0.13505	0.16905	0.21867	0.29534	0.42911	0.71033	1.48366
0.11135	0.13534	0.17358	0.22332	0.30642	0.43200	0.74237	1.64830
0.11239	0.13762	0.17431	0.22604	0.30663	0.44121	0.74838	1.65564
0.11299	0.13895	0.17528	0.22852	0.31239	0.45468	0.79571	1.88850
0.11338	0.14184	0.17654	0.23059	0.31646	0.46648	0.79876	2.04174
0.11582	0.14210	0.18080	0.23155	0.32345	0.47462	0.81359	2.08052
0.11619	0.14359	0.18094	0.23741	0.32523	0.49223	0.82984	2.25611
0.11713	0.14564	0.18399	0.24091	0.33020	0.49273	0.87291	2.59350
0.11879	0.14790	0.18562	0.24358	0.33572	0.50459	0.88310	2.69667
0.11911	0.14841	0.18940	0.24457	0.34349	0.51007	0.92015	3.20180
0.12019	0.14998	0.18995	0.24862	0.34644	0.53016	0.93486	3.43613
0.12237	0.15089	0.19341	0.25122	0.34924	0.53456	0.98729	3.78013
0.12308	0.15286	0.19387	0.25360	0.35105	0.55214	1.02631	
0.12374	0.15334	0.19619	0.25389	0.36294	0.56157		

**RDF # 13*****Bell peppers : canned, frozen and cured*****FDA data from 1993-1998 (1613 samples, 338 detects)****Data Used directly****21% detected ( actual residues found were 0.007 - 0.87 ppm)****48% CT**

Bell peppers-frozen

48% CT

Totalz = 841

434, 0.00015	0.06300	0.25000	0.12000	0.02000	0.27000	0.03000
0.01000	0.08500	0.02200	0.01000	0.03000	0.22000	0.07000
0.01000	0.86000	0.01500	0.06000	0.15000	0.21000	0.20000
0.02600	0.07000	0.06000	0.08000	0.25000	0.06000	0.01000
0.31000	0.02100	0.00700	0.20000	0.50000	0.05000	0.70000
0.14000	0.02700	0.0003	0.10000	0.10000	0.04000	0.09000
0.20000	0.06000	0.07000	0.55000	0.04000	0.07000	0.01100
0.20000	0.21000	0.11000	0.07000	0.12000	0.0003	0.0003
0.12600	0.07000	0.07000	0.04000	0.03000	0.06000	0.08000
0.03000	0.60000	0.29000	0.09000	0.04000	0.22000	0.12900
0.30000	0.20000	0.09000	0.12000	0.20000	0.18000	0.13600
0.09800	0.06000	0.13000	0.20000	0.15000	0.06000	0.06800
0.01100	0.12000	0.15000	0.01600	0.35000	0.06000	0.38900
0.17000	0.11000	0.26000	0.05000	0.09000	0.08000	0.07000
0.26000	0.10000	0.24000	0.40000	0.08000	0.10000	0.02400
0.12000	0.01000	0.14000	0.43100	0.09000	0.0003	0.34000
0.28000	0.15000	0.15000	0.12000	0.10000	0.37000	0.23000
0.46000	0.01000	0.25000	0.12000	0.07000	0.0003	0.27000
0.14000	0.02000	0.02000	0.11000	0.12000	0.17000	0.39000
0.50000	0.07000	0.03000	0.0003	0.03000	0.15000	0.21000
0.26000	0.15000	0.10000	0.11000	0.03000	0.02500	0.17000
0.26000	0.06000	0.12000	0.08000	0.13000	0.04000	0.42000
0.31000	0.35000	0.13000	0.26000	0.10000	0.20000	0.37000
0.03000	0.60000	0.14000	0.26000	0.15000	0.30000	0.26000
0.40000	0.10000	0.10000	0.55000	0.10000	0.0003	0.87000
0.30000	0.20000	0.13000	0.11000	0.12000	0.20000	0.56700
0.80000	0.50000	0.20000	0.03000	0.03000	0.03000	0.02800
0.15000	0.40000	0.15000	0.19000	0.02000	0.05000	0.09700
0.20000	0.07000	0.35000	0.13000	0.18000	0.04000	0.20000
0.03000	0.50000	0.12000	0.24000	0.10000	0.30000	0.25000
0.02500	0.15000	0.05000	0.07000	0.04000	0.13000	0.15000
0.02000	0.14000	0.10000	0.04000	0.13000	0.15000	0.10000
0.47000	0.06000	0.30000	0.10000	0.04000	0.03000	0.08000
0.17000	0.01000	0.15000	0.03000	0.39700	0.12000	0.01000
0.13000	0.05000	0.04000	0.09000	0.71000	0.01000	0.03000
0.10000	0.03800	0.12000	0.17000	0.01000	0.17000	0.02000
0.09000	0.16000	0.10000	0.02000	0.02000	0.15000	0.15000
0.23000	0.43000	0.10000	0.25000	0.03000	0.19000	0.09000
0.07000	0.06000	0.15000	0.0003	0.01500	0.18000	0.03000
0.04500	0.09000	0.12000	0.02000	0.05500	0.09000	0.05000
0.07000	0.11000	0.01000	0.10000	0.01800	0.05000	0.14000
0.08000	0.15000	0.08000	0.04000	0.09000	0.10000	0.06000
0.03000	0.09000	0.12000	0.06000	0.20000	0.17000	0.15000
0.21000	0.04800	0.14000	0.07000	0.33000	0.50000	0.10000
0.02700	0.57000	0.15000	0.08000	0.20100	0.0003	0.45000
0.09200	0.17000	0.18000	0.07000	0.0003	0.15000	0.12000

0.01000	0.16000	0.80000	0.06000	0.02200	0.07500	0.30500
0.20000	0.10000	0.03000	0.08000	0.03000	0.04400	0.10400
0.02000	0.10000	0.07000				

**Quantitative Usage Analysis for Methamidophos**

Case Number: 0043 PC Code: 101201

Date: 11/12/98 Analyst: Tim Kiely

Based on available pesticide survey usage information for the years of 1987 through 1996, an annual estimate of methamidophos' total domestic usage is approximately 674,000 pounds active ingredient (a.i.) for 500,000 acres treated. Most of the acreage is treated with 2.1 pounds a.i. or less per application and 4.5 pounds a.i. or less per year. Methamidophos is an insecticide with its largest markets in terms of total pounds active ingredient allocated to potatoes (58%) and tomatoes (25%). No other crop is treated with more than 5% of the total pounds of methamidophos applied. Crops with a high percentage of their total U.S. planted acres treated include eggplant (33%), potatoes (21%), cabbage (20%) and tomatoes (19%). No other crop has more than 6% of their total U.S. planted acres treated with methamidophos. The usage of methamidophos on all sites, except tomatoes, potatoes and cotton, was canceled in December, 1997.

This quantitative usage analysis updates estimates provided in an earlier BEAD usage profile (Grube/Wise, 9/97).

## ATTACHMENT 10: Quantitative Usage Analysis

U.S. EPA, Quantitative Usage Analysis, Methamidophos, November 12, 1998.

Site	Acres Grown (000)	Acres Treated (000)		% of Crop Treated		LB AI Applied (000)		Average Application Rate			States of Most Usage	
		Wtd Avg	Est Max	Wtd Avg	Est Max	Wtd Avg	Est Max	lb ai/ acre/yr	#appl / yr	lb ai/ A/appl	(% of total lb ai used on this site)	
Cantaloupes /1	113	4	10	4%	9%	2	5	0.5	1.0	0.5	CA TX 100%	
Melons, Honeydew /1	27	1	4	4%	15%	2	4	2.0	1.7	1.2	TX CA 100%	
Watermelons /1	258	3	9	1%	3%	5	11	1.7	1.0	1.7	FL TX 95%	
Eggplant /1	4	1	3	33%	75%	6	14	4.5	5.4	0.8	FL 100%	
Peppers, Hot /1	23	0	1	1%	6%	0	1	0.5	1.0	0.5	CA 100%	
Peppers, Sweet /1	77	4	12	6%	16%	3	8	0.7	1.0	0.7	TX CA 100%	
Lettuce, Head /1	204	4	7	2%	3%	6	11	1.5	1.0	1.5	FL 100%	
Celery /1	35	1	4	3%	11%	3	6	2.5	1.4	1.8	FL 89%	
Broccoli /1	111	5	11	5%	10%	8	12	1.6	1.3	1.2	CA 80%	
Brussels Sprouts /1	3	0	2	0%	67%	1	5	1.5	1.9	0.8	CA 100%	
Cabbage /1	85	17	26	20%	30%	18	36	1.1	1.0	1.1	FL WI TX NC 81%	
Cauliflower /1	58	1	2	2%	3%	1	4	0.8	1.9	0.4	FL NY CA 87%	
Cucumbers /1	146	2	7	1%	5%	4	10	2.1	1.0	2.1	FL 98%	
Tomatoes	500	94	135	19%	27%	170	295	1.8	2.0	0.9	FL CA 88%	

Site	Acres Grown (000)	Acres Treated (000)		% of Crop Treated		LB AI Applied (000)		Average Application Rate			States of Most Usage (% of total lb ai used on this site)
		Wtd Avg	Est Max	Wtd Avg	Est Max	Wtd Avg	Est Max	lb ai/ acre/yr	#appl / yr	lb ai/ A/appl	
Potatoes	1,421	301	389	21%	27%	390	560	1.3	1.5	0.9	WA ND OR CA ME DE 63%
Alfalfa /1	23,949	6	13	0%	0%	4	15	0.7	1.3	0.5	CA 88%
Cotton	12,429	36	80	0%	1%	31	70	0.9	1.2	0.7	CA AZ MS LA 83%
Sugar Beets /1	1,415	19	37	1%	3%	20	38	1.0	1.3	0.8	CA 100%
Totals		500	626			674	889				

#### COLUMN HEADINGS

Wtd Avg = Weighted average--the most recent years and more reliable data are weighted more heavily.

Est Max = Estimated maximum, which is estimated from available data.

Average application rates are calculated from the weighted averages.

#### NOTES ON TABLE DATA

/1 The usage of methamidophos on all sites, except tomatoes, potatoes and cotton, was canceled in December, 1997.

Usage data primarily covers 1987 - 1996. Calculations of the above numbers may not appear to agree because they are displayed as rounded to the nearest 1000 for acres treated or lb. a.i. (Therefore 0 = < 500)

to the nearest whole percentage point for % of crop treated. (Therefore 0% = < 0.5%)

0\* = Available EPA sources indicate that no usage is observed in the reported data for this site,  
which implies that there is little or no usage.

A dash (-) indicates that information on this site is NOT available in EPA sources or is insufficient.

SOURCES: EPA data, USDA, and National Center for Food and Agricultural Policy

ATTACHMENT 11: Summary of Methamidophos Anticipated Residues (acephate application only)

Table 2. Summary of Methamidophos Anticipated Residues (acephate application only) for Chronic Dietary Risk Assessment

Commodity	Recommended Tolerance (ppm) Methamidophos	Methamidophos Anticipated Residue	Percent crop treated <sup>a</sup>	
			Average	
<b>Acephate</b>				
Beans (Succulent and Dry) fresh cooked canned	1	0.16 0.05 0.03	2	
Brussels sprouts	1	0.05	11 <sup>b</sup>	
Cauliflower	1	0.13	11	
Celery	1	0.09	49	
Cottonseed oil meal	0.1	0.04 0.04	9	
Cranberries	0.1	0.1	34	
Head Lettuce	1	0.1	47	
Macadamia Nuts	no tolerance established	0.01	0.1 <sup>c,d</sup>	
Mint tops and leaves oil	2	2 2	31	
Peanut	no tolerance established	0.01	5	
Peppers	1	0.45(non-bell)/ 0.31(bell)	24	
Soybean	no tolerance established	1	0.1 <sup>c</sup>	

a. Percent crop treated information has not been included in the anticipated residues.

b. Translated from cauliflower

c. BEAD reports 0.1% crop treated; however, 1 is used as a default.

d. Translated from almonds

Table 3. Summary of Data Used for Methamidophos (acephate application only) in Acute Monte Carlo Assessment

ATTACHMENT 11: Summary of Methamidophos Anticipated Residues (acephate application only)

Commodity/ Food Form	Blended (B) Partially Blended (PB) Not Blended (NB)	% CT Estimated Max	Data Source PDP/FDA/FT	Anticipated Residue or Residue Data File
				Methamidophos
Succulent Beans (all food forms)	PB	39/47 fresh/proc.	PDP (1994 - 1997)	Use directly - RDF 714NZ, 1457Z, 217 ½LOD (Fresh)  714NZ, 1266Z, 408 ½LOD (Processed)
Dry Beans (all food forms)	B	5	FT	AR = 0.005 x 0.05 (% CT) = 0.00025ppm
Brussels sprouts (all food forms)	PB	21 <sup>c</sup>	FT	RDF = 23 Z, 6 NZ
Cauliflower (all Food Forms except frozen:cooked)	NB	21	FDA (1993-1998)	RDF = 6 detects, 169Z, 39 ½LOD
Cauliflower ( frozen:cooked)	PB			RDF = 6 detects, 169Z, 39 ½ LOD
Celery (all food forms except canned, frozen, and celery juice)	NB	68	PDP (1994)	Decomposite 1000NZ 1231Z 1615 @1/2LOD
Celery (canned, frozen, juice)	PB	68		Use directly-RDF 45NZ, 56Z, 75 ½LOD
Cottonseed meal	B	13	FT	AR = 0.02x (Processing Factor=1.00) x 0.13 (% CT)=0.0026
Cottonseed oil	B	13	FT	AR = 0.02x (Processing Factor=1.00) x 0.13 (% CT)=0.0026
Cranberries	PB	51	FT	RDF = 51@0.005, 49Z
Cranberry juice	PB		FT	RDF = 51@0.005, 49Z (Default Processing Factor)
Head Lettuce	NB	63	PDP (1994)	Decomposite 1000NZ 6167Z 9499 @1/2LOD

ATTACHMENT 11: Summary of Methamidophos Anticipated Residues (acephate application only)

Commodity/ Food Form	Blended (B) Partially Blended (PB) Not Blended (NB)	% CT Estimated Max	Data Source PDP/FDA/FT	Anticipated Residue or Residue Data File Methamidophos
Macadamia Nuts	PB	0.2 <sup>d,f</sup>	FT	RDF = 1 @ 0.01 99 @ 0
Mint	B	42	FT	AR = 0.5 X 0.42 (%CT) = 0.21
Mint oil	B		FT	AR = 0.01 ppm X 0.42 (%CT) = 0.0042
Peanut (all food forms)	B	10	FT	AR = 0.01 X 0.10 (%CT) = 0.001
Peanut Processed Commodities	B			AR = 0.01 X 0.10 (%CT) = 0.001 x (default processing factor)
Pepper Bell,(all food forms except canned, frozen and cured)	NB	48 <sup>e</sup>	FT	RDF = 8NZ,9Z
Peppers ,Bell (canned, frozen, cured)	PB	48 <sup>e</sup>	FT	RDF = 8NZ, 9Z
Pepper, Non Bell (all food forms except canned, frozen and cured)	NB	48 <sup>e</sup>	FT .	RDF = 4NZ, 4Z
Peppers, Non-Bell (canned, frozen and cured)	PB	48 <sup>e</sup>	FT	RDF = 4NZ, 4Z
Soybean	B	0.2 <sup>f</sup>	FT	AR = 0.008 X 0.01 (%CT) = 0.00008
Soybean processed commodities	B	0.2 <sup>f</sup>	FT	AR = 0.008 X 0.01 (%CT) = 0.00008

a. NZ = nonzeroes; Z = zeroes, LOD = Limit of Detection

b. RDF = Residue Distribution File; AR = Anticipated Residue

c. Percent crop treated translated from cauliflower

d. Percent crop treated translated from almonds

e. Percent crop treated translated from bell peppers

f. BEAD reported 0.2% crop treated; however, 1 is used as a default.